Since 1980/1993

KOSDAQ LISTED COMPANY | Smart-Lab™Sys. On Mobile | Small Giant Corp. of Korea | GOOD DESIGN | Excellent Service Quality

- ☑ CE Certified
- ☑ Excellent Service Quality - Certified
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- ☑ GMP Certified for Medical Instruments
- ☑ ISO 9001 Certified
- ☑ ISO 13485 Certified for Medical Instruments
- ☑ UL Certified
- ☑ PL Insurance, Validation(IQ & OQ) Service
- ☑ Patented(No. 10-0554098) Jog Shuttle Control System

ALLforLAB.com Open-market
DAIHAN-Analy.com
DAIHAN-Sci.com Shopping-mall
DAIHANused.com
LabRental.co.kr
Lab-Service.co.kr

2020
DAIHAN Scientific

Laboratory & Measuring Instruments
with New & Renewed Products

Sales & Service
- by the Nearest Distributors

DAIHAN Scientific
YOUR PARTNER in LABORATORY
Republic of Korea

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2020 DAIHAN®
Laboratory & Measuring Instruments "Overview"

Balance

Analytical

Electronic Lab

General Purpose & Industry

InBalance™ Body Composition Analyzer

Moisture Analyzer

Bath

Basic Bath, 100~250℃

Cold Trap Bath

Extraction Water Bath

Shaking Water Bath

Viscosity Bath

Bath Circulator

Circulation Water bath

Refrigerated / Heating

Blender

Sample Mixer

Centrifuge

Mini-micro Centrifuge

Pro-micro Centrifuge

Centrifuge

Table Top Centrifuge

Chiller/Cooling Circulator

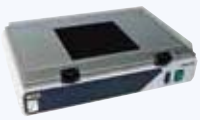
Chiller / External Circulator

Desiccator Cabinet

Desiccator Cabinet

Electrophoresis

Gel Documentation System


UV Transilluminator

Evaporator

Rotary Vacuum Evaporator

Freeze Dry System

Bench-top Freeze Dryer

Fume Hood & Clean Bench

Clean Bench-Ductless

Fume Hood-Ducted

Furnace

Muffle Furnace, 1000~1650℃

<Continued On Next Page>

All DAIHAN® Lab Instruments have a *1-/2-Year Global Warranty*

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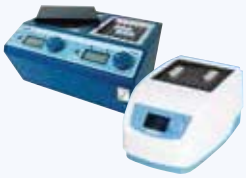
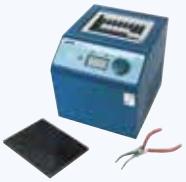
Furniture

Laboratory Assembly-type

Heating Block / Dry Bath Incubator



Heating Block



Heating & Cooling Block

Heating / Cooling Circulator

External Circulator

Heating Mantle

Heating Mantle

Heating Mantle

Multi Heating Mantle

Homogenizer

Analog & Digital

Hotplate

600℃ High-Temp. Hi-Light Hotplate

500℃ High-Temp. Hotplate

380℃ Hotplate Analog & Digital

Hotplate

350℃ Large Plate Hotplate

Hotplate Stirrer

500℃ High-Temp. Hotplate Stirrer

380℃ Hotplate Stirrer Analog & Digital

Multi Hotplate Stirrer 3- / 6-places

Ice Maker

Ice Maker

Incubator

CO_2 Incubator

General Mini Low Temp / Shaking 20Lit

General Purpose Forced- & Gravity-air

General Purpose Multi, 4-room

Humidity / Temp. Chamber

Incubator

Low Temp (B.O.D) Incubator

Plant Growth Chamber

Shaking Incubator Front Door-type, 127Lit

Shaking Incubator Top Door-type, 101Lit

Shaking Incubator Top Door-type, 229Lit

<Continued On Next Page>

2020 DAIHAN®
Laboratory & Measuring Instruments "Overview"

Incubator

Shaking Multi-Stack Incubator

Magnifier

Light Magnifier Fluorescent / LED

Measuring

Anemometer / Air Flow

Gas Detector / Monitor

Salinity Meter

Measuring

Sound Level(Noise) Meter

Thermo-Hygrometer

Thermometer, Infra-Red "IR"

Thermometer, K-type / NTC-type / Pt100 / WBGT

Melting Point Analyzer

Melting Point Analyzer

Mill

Ball Mill

Cutting Mill & Pin Mill

Mill Mixer

Oven

General Oven Forced- & Gravity-air

High Clean Air Oven

Oven

Industrial Forced-air Oven

Vacuum Oven

Pump

Vacuum Pump

Reaction System

Reaction System for Lab & Pilot Plant Glass Vessel 0.1~100Lit.

Refrigerator

2~10℃ Blood Bank & Pharmaceutical

0~10℃ Lab Refrigerator

-35℃ Bio Freezer

-86℃ ULT Freezer, UniFreez™

-95℃ ULT Freezer, DuoFreez™

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All DAIHAN® Lab Instruments have a *1-/2-Year Global Warranty*

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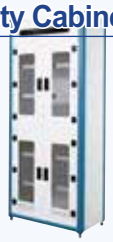
Safety Cabinet



Cabinet for Chemicals, PP

Cabinet for Flammable, Steel

Shaker

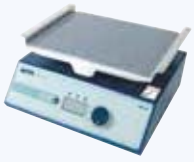
Mixer / Rocker

Mixer / Tube Rotor

Mixer / Vortex

Shaker

Orbital-/Reciprocating-Shaker



Rocker

Rotator

Sterilizer

Autoclave

Autoclave, Bench-top

Sterilizer

Autoclave, Front Door

Dry Heat Sterilizer

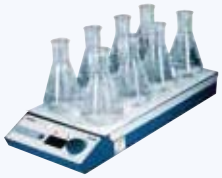
Plasma Sterilizer

Stirrer, Magnetic

Magnetic, Digital Mini & Midi

Magnetic, High-Performance

Stirrer, Magnetic



Magnetic, Multi-point

Stirrer, Overhead

Overhead, Hi-speed ~3000rpm

Overhead, Hi-torque ~200,000mPas

Overhead, Hi-torque Ultra ~350,000mPas

Ultrasonic Cleaner

Ultrasonic Cleaner

Viscosity

Rotary Viscometer

Washer

Glass / Labware Washer

Water Purification

Basic Water Still

Classic Water Still

UP&RO Filtration System

DAIHAN Scientific

Autoclave

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※ The Details ; Please See the "Sterilizer" Section, Page 212~216

Autoclave, Bench-top ***New*** ····· P. 214~215
, Front Door ***New*** ····· P. 216
, Vertical ····· P. 212~213
, Accessory ***New*** ····· P. 213

Programmable Bench-top, 21.5Lit
"MaXterile™ B21"

Programmable Bench-top, 25 · 40 Lit
"MaXterile™ BT"

Front Door, 90Lit
"MaXterile™ FL90"

Vertical, 47 · 60 · 80 · 100 Lit
"MaXterile™ 80"

DAIHAN Scientific

Balance

Balance - Analytical ..... P. 12~13
- Electronic Laboratory *New* ..... P. 14~16
- General purpose & Industry *New* ..... P. 17~19
- Pocket ..... P. 11, 16

InBalance™ - 200 ..... P. 20
- 300 ..... P. 21

Moisture Analyzer ..... P. 22

Accessory ..... P. 23~25

"Auto Int-CAL"

Analytical Balance
"WBA-220A"
[d] 0.1mg, max.220g

"Ext-CAL"

NEW

Electronic Lab Balance
"Bal-D210S"
[d] 1mg, max.210g

"Ext-CAL"

Moisture Analyzer
"WBA-110M"
[d] 1mg, max.110g

DAIHAN® [d] 0.05g/0.2g, max.300g/1000g Pocket Digital Balance "Bap", 9×14×2.4cm, 400g

With Counting Pcs · %, Function and Leather Case, Pocket-size Body, 포켓 디지털 바란스

"Ext-CAL"
[d] 0.05g,max.300g

CE

1-Year Warranty

Pocket Balance, "Bap300"

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***1-Year Warranty***

- Ergonomic Design for Intuitive User Interface
- Pcs. Counting & Weighing Mode
- External Calibration
- LCD-display
- Ambient Temperature 5℃~35℃
- Numeric Linearity Calibration
- Included Battery(AAA 1.5V×3Ea)

Specifications & Ordering information

Spec. \ Model	"Bap300"	"Bap1.0k"
Weighing Range. g	max.300g	max.1000g
Weighing Plate. mm	68×85 mm	
Read-Out [d] & Reproducibility. g	0.05 g & 0.05 g	0.2 g & 0.2 g
Material	Body : ABS, Platform : Stainless-steel	
Dimension & Weight	90×140×h24 mm, and 0.4 kg	
Packing & Gross Weight	95×160×h35 mm, and 0.5 kg	
Power Supply	AAA Battery(DC 1.5V)	
Cat. No.	DH.Bal3011	DH.Bal3012
Price, Each. ₩		

DAIHAN® [d] 0.1mg, max.220g Standard Analytical Balance, Ext-CAL "WBA-220", Auto Int-CAL "WBA-220A"

With Glass Draft Shield, Backlit LCD, Counting Function, Various Weight Mode, Φ80 / 90mm Weighing Plate

"Ext-CAL 외부 보정형" & "Int-CAL 자동 보정형" 표준 분석/화학 천평, 계수계 겸용, 작업보호커버 포함

"Ext-CAL"

[d] 0.1mg, max.220g

Included 200g Calibration Weight

2-Year Warranty

Ext-CAL "WBA-220"

"Auto Int-CAL"

[d] 0.1mg, max.220g

2-Year Warranty

Int-CAL "WBA-220A"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Available Counting & Weighing Mode***
- ***Various Weight Mode (g/ct/%/GN/dwt/etc)***
- ***Numberic Linearity Calibration*** ■ ***Weighing Response Time Adjustable***
- ***Blue Back Light LCD***
- ***Supplied with : - Φ80/90mm Weighing Plate and Glass Draft Shield***
  - AC 230V Adapter for DC Power 15V / 500mA(WBA-220A)
  - 200g Calibration Weight (Ext-CAL Model)

∗ Ambient Temperature 5.0~35℃
∗ Stabilization Time(Typical at Fast) ≤ 8 Seconds
∗ Appearance Parameters
∗ Built in RS232C for Printer
∗ Built in Under Hook
∗ Electro Magnetic Base

Specifications & Ordering information

Spec. \ Model	"WBA-220" Ext-CAL	"WBA-220A" Auto Int-CAL
Weighing Range. g	**max.220 g**	
Weighing Plate. mm	Φ 80 mm	Φ 90 mm
Read-Out [d]. mg	0.1 mg	
Reproducibility. mg	0.1 mg	
Linearity. mg	0.1 mg	
Ambien Temperature	5.0~35℃	
Weight Mode	g / ct	g / ct / % / GN / dwt / etc.
Counting Mode	Available Counting & Weighing Mode	
Calibration	**External Calibration, Included 200g Calibration Weight**	**Internal Calibration, AUTO**
Display	Digital LCD with Back-Light Function	
Dimension & Net Weight	190×240×h265mm / 6.3 kg	223×345×h331mm / 5.7 kg
Packing Size & Gross Weight	290×420×h490mm / 8.3 kg	390×510×h520mm / 10.1 kg
Electrical Reqts.	AC 220V, 50 / 60Hz	DC 15V, with AC 230V Adapter, 50/60Hz
Cat. No.	**DH.WBA0220**	**DH.WBA0220A**
Price, Each. ₩		

Optional Thermal Printer

∗ Model Name Required for Printer Installation

		Ea. Price, ₩
SL.WBA.100P	(1) Thermal Printer, Paper Roll, **"WBA-100"** Included Cable Module, 1×Paper Roll	
DH.WBA0084	Thermal Paper Package, 5×Paper Roll, for **"WBA-100"**	
SL.WBA.420P	(2) Thermal Printer, Label Paper Roll, **"WBA-420"** Included Cable Module, 1×Label Paper Roll	
DH.WBA0771	Thermal Label Paper Package, 5×Label Paper Roll, for **"WBA-420"**	

(1) RS-232C Thermal Printer, "WBA-100"

(2) RS-232C Thermal Label Printer, "WBA-420"

DAIHAN® [d] 1mg, max.320g/620g Hi-Precision Lab Balance, Ext-CAL "WBA-320/620", Int-CAL "WBA-620A"

With Glass Draft Shield, Super Size Backlit LCD, Counting Function, Various Weight Mode, Φ90 / 110 / 128mm Weighing Plate

"Ext-CAL 외부 보정형" & "Int-CAL 자동 보정형" 다기능 랩 바란스, g / 계수 / % 측정, 작업보호커버 포함

"Ext-CAL"

[d] 1mg, max.320g / 620g

Included 200g Calibration Weight

2-Year Warranty

Ext-CAL "WBA-320" & "WBA-620"

"Auto Int-CAL"

[d] 1mg, max.620g

2-Year Warranty

Int-CAL "WBA-620A"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Available Counting & Weighing Mode***
- ***Various Weight Mode (g/ct/GN/dwt/etc.) and Percent(%) Weighing Mode***
- ***Numberic Linearity Calibration***
- ***Time & Date Setting for Recording Data***
- ***Supplied with : - Glass Draft Shield***
  - ***200g or 500g Calibration Weight (WBA-320 : 200g, WBA-620 : 500g)***
  - ***AC Adapter for DC Power 12V/500mA(WBA-320), 15V/300mA(WBA-620/-620A)***
- ***Available Rechargeable Battery(WBA-320, 6V/1.2A, Excluded)***
- ***Four Level Anti-shock Adjustable Function*** ■ ***For Both AC and DC***
- ***Weighing Response Time Adjustable*** ■ ***Super Size Back Light LCD***

∗ Ambient Temperature 5.0~35℃
∗ Stabilization Time(Typical at Fast) ≤ 8 Seconds
∗ Default and Auto Lock Present Working Mode
∗ Built in RS232C & USB port for Printer
∗ Electro Magnetic Base
∗ Display Present Temperature
∗ Built in Under Hook

Specifications & Ordering information

Spec. \ Model	"WBA-320" Ext-CAL, 320g	"WBA-620" Ext-CAL, 620g	"WBA-620A" Auto Int-CAL, 620g
Weighing Range. g	max.320 g	max.620 g	
Weighing Plate. mm	Φ 90 mm	Φ 128 mm	Φ 110 mm
Read-Out [d]. g	0.001 g		
Reproducibility. g	0.001 g		
Linearity. g	0.001 g		
Ambient Temp.	5.0~35℃		
Weight Mode	% Mode and Available g-/ct-/GN-/dwt-/etc.		
Counting Mode	Available Counting & Weighing Mode		
Calibration	External Calibration		Internal Calibration
	Included 200g Calibration Weight	Included 500g Calibration Weight	AUTO
Display	Digital Super Size LCD with Back-Light Function		
Dimension & Net Weight	223×345×h331mm 3.6 kg	223×345×h331mm 5.7 kg	
Packing Size & Gross Weight	290×385×h365mm 5.1 kg	390×510×h520mm 10.1 kg	
Electrical Reqts.	DC 12V, with AC 230V Adapter, 50/60Hz	DC 15V, with AC 230V Adapter, 50/60Hz	
Cat. No.	DH.WBA0320	DH.WBA0620	DH.WBA0620A
Price, Each. ₩			

Optional Thermal Printer

∗ Model Name Required for Printer Installation

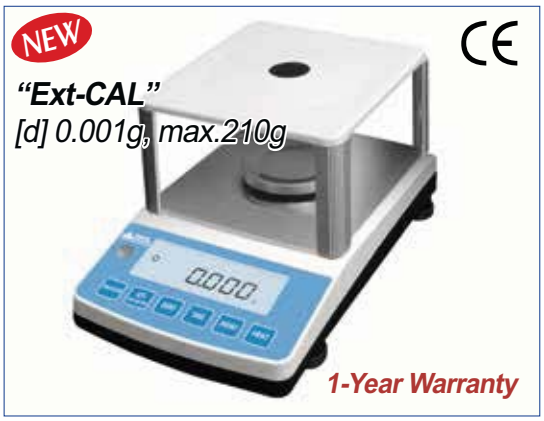
		Ea. Price, ₩
SL.WBA.100P	(1) Thermal Printer, Paper Roll, **"WBA-100"** Included Cable Module, 1×Paper Roll	
DH.WBA0084	Thermal Paper Package, 5×Paper Roll, for **"WBA-100"**	
SL.WBA.420P	(2) Thermal Printer, Label Paper Roll, **"WBA-420"** Included Cable Module, 1×Label Paper Roll	
DH.WBA0771	Thermal Label Paper Package, 5×Label Paper Roll, for **"WBA-420"**	

(1) RS-232C Thermal Printer, "WBA-100"

(2) RS-232C Thermal Label Printer, "WBA-420"

DAIHAN® [d] 1mg/10mg, max.210g/2100g High-Precision Lab Balance "Bal-D", Ext-CAL, RS-232C NEW
With Counting Function, Various Weight Mode, DC Adaptor, Basic & Shield Type, 정밀 랩 바란스, 계수계 겸용

(1) Basic-type, "Bal-D2100"



(2) Glass Shield-type, "Bal-D210S"

(3) RS-232C Thermal Printer, "WBA-100"

(4) RS-232C Thermal Label Printer, "WBA-420"

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***1-Year Warranty***

■ ***Digital Large LCD Display and Ergonomic Design***

* Pcs. Counting & Weighing Mode
* Easy Operation Weighing Mode : Gram, Metric, and Carat
* Material : Stainless-steel Weighing Plate and ABS Resin Body
* Stabilization Time : 3Sec
* Permissible Ambient Temp. 5℃~35℃
* RS-232C Interface and Level-Gauge integrated
* Rechargeable Battery integrated, and with AC 230V Adapter for DC Power 12V/300mA
* External Calibration

(1) Basic-type Precision Balance

Specifications & Ordering Information

Spec. \ Model	Bal-D210	Bal-D2100
Weighing Range. g	**max.210g**	**max.2100g**
Read-Out [d]. g	0.001g	0.01g
Reproducibility. g	0.001g	0.01g
Linearity. g	0.001g	0.01g
Weighing Mode	g, PCS, %	
Display	Digital LCD with Back-Light Function(110×h35mm)	
Weighing Plate. mm	129×119mm	
Dimension & Weight	170×250×h65mm, 1.4kg	
Packing & Gross Weight	210×300×h70mm, 1.6kg	
Power Supply	Adaptor DC 12V/300mA, 220V/60Hz	
Cat. No.	**DH.Bal8051**	**DH.Bal8056**
Price, Each. ₩		

(2) Glass Draft Shield-type Precision Balance

Specifications & Ordering Information

Spec. \ Model	Bal-D210S	Bal-D2100S
Weighing Range. g	**max.210g**	**max.2100g**
Read-Out [d]. g	0.001g	0.01g
Reproducibility. g	0.001g	0.01g
Linearity. g	0.001g	0.01g
Weighing Mode	g, PCS, %	
Display	Digital LCD with Back-Light Function(110×h35mm)	
Weighing Plate. mm	Φ80mm	
Dimension & Weight	170×250×h135mm, 1.7kg	
Packing & Gross Weight	210×300×h150mm, 2.5kg	
Power Supply	Adaptor DC 12V/300mA, 220V/60Hz	
Cat. No.	**DH.Bal8061**	**DH.Bal8066**
Price, Each. ₩		

Optional Thermal Printer

* Model Name Required for Printer Installation

		Ea. Price, ₩
SL.WBA.100P	(3) Thermal Printer, Paper Roll, **"WBA-100"** Included Cable Module, 1×Paper Roll	
DH.WBA0084	Thermal Paper Package, 5×Paper Roll, for **"WBA-100"**	
SL.WBA.420P	(4) Thermal Printer, Label Paper Roll, **"WBA-420"** Included Cable Module, 1×Label Paper Roll	
DH.WBA0771	Thermal Label Paper Package, 5×Label Paper Roll, for **"WBA-420"**	

DAIHAN® [d] 0.01g, max.3200g/6200g Hi-Standard Lab Balance "WBA-3200/6200", 168×168mm Weighing Plate

With Super Size Back Light LCD, Counting Function, Ext-CAL, 2kg Cali. Weight, Various Weight Mode, with Certi. & Traceability

표준 다용도 랩 바란스, g / **계수** / % **측정,** Ext-CAL(**표준분동 포함**), 4**각 플레이트**

Hi-Standard Lab Balance, "WBA-3200"

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Available Counting & Weighing Mode***
- ■ ***Various Weight Mode (g/ct/GN/dwt/etc.) and Percent(%) Weighing Mode***
- ■ ***External Calibration***
- ■ ***Numberic Linearity Calibration*** ■ ***For Both AC and DC***
- ■ ***Includes AC 230V Adapter for DC Power 12V/500mA***
- ■ ***Available Rechargeable Battery (6V/1.2A, Excluded)***
- ■ ***Four Level Anti-shock Adjustable Function***
- ■ ***Time & Date Setting for Recording Data***
- ■ ***Weighing Response Time Adjustable*** ■ ***Super Size Back Light LCD***

∗ Ambient Temperature 5.0 ~ 35℃
∗ Stabilization Time(Typically Fast) ≤ 8 Seconds
∗ Default and Auto Lock Present Working Mode ∗ Display Present Temperature
∗ Included 2kg(1kg×2Ea.) Calibration Weight (only WBA-3200)
∗ Built in RS232C & USB port for Printer ∗ Built in Under Hook
∗ Electro Magnetic Base ∗ Glass Draft Shield(Optional)

Specifications & Ordering information

Spec. \ Model	"WBA-3200"	"WBA-6200"
Weighing Range. g	max.3200 g	max.3200 g
Weighing Plate. mm	168×168 mm	
Read-Out [d]. g	0.01 g	
Reproducibility. g	0.01 g	
Linearity. g	0.01 g	
Ambient Temperature	5.0~35℃	
Weight Mode	% Mode and Available g-/ct-/GN-/dwt-/etc.	
Counting Mode	Available Counting & Weighing Mode	
Calibration	External Calibration	
	Included 2kg Calibration Weight	none
Display	Digital Super Size LCD with Back-Light Function	
Dimension & Net Weight	195×295×h90mm / 2.6 kg	
Packing Size & Gross Weight	243×377×h163mm / 3.2 kg	
Electrical Reqts.	DC 12V, with AC 230V Adapter, 50/60Hz	
Cat. No.	DH.WBA3200	DH.WBA6200
Price, Each. ₩		

(1) Glass Draft Shield (Optional)

Optional Glass Draft Shield

∗ Target Model Required for Shielding Installation

		Ea. Price, ₩
DH.WBA0003	(1) Glass Draft Shield, 3 Slide Doors(Left, Right, Top), 175×195×h230 mm	

(2) RS-232C Thermal Printer, "WBA-100"

Optional Thermal Printer

∗ Model Name Required for Printer Installation

		Ea. Price, ₩
SL.WBA.100P	(2) Thermal Printer, Paper Roll, **"WBA-100"** Included Cable Module, 1×Paper Roll	
DH.WBA0084	Thermal Paper Package, 5×Paper Roll, for **"WBA-100"**	
SL.WBA.420P	(3) Thermal Printer, Label Paper Roll, **"WBA-420"** Included Cable Module, 1×Label Paper Roll	
DH.WBA0771	Thermal Label Paper Package, 5×Label Paper Roll, for **"WBA-420"**	

(3) RS-232C Thermal Label Printer, "WBA-420"

DAIHAN® [d] 0.01g/0.1g, max.610g/6100g Multi-use Digital Balance "Ba-series", RS-232C, DC & AC Adapter

With g/Metric/Pcs/%/Carat/CHK/Bargraph/Density test-Function, 다용도 전자 바란스, 무게/계수/퍼센트/캐럿/비교계량/비중측정 & 동물계량 기능

■ Made in Korea ***■ CE Certified*** ***■ 1-Year Warranty*** ***■ Digital Large LCD Display and Ergonomic Design***

- Metric Function : Animal Weighing, Bar-Graph Display, Comparison Weighing CHK, Counting 10~100 Pcs., Density Determination, Percent % and Sub-Scale Dual Display
- 5× Touch Key : 1/2D*, MODE, ZERO, TARE, ENTER, and PRINT
- 3Sec. Stabilization Time, and Permissible Ambient Temp. 5℃~35℃
- Rechargeable Battery integrated, and with AC 230V Adapter for DC Power 12V/300mA
- Easy Operation Weighing Mode : Gram, Metric, and Carat
- Material : Stainless-steel Weighing Plate and ABS Resin Body
- RS-232C Interface and Level-Gauge integrated
- External Calibration

(1) [d] 0.01g, max.210~610g Model, Multi-use Balance

"Ext-CAL"
[d] 0.01g, max.610g

1-Year Warranty

(1) Multi-use Balance, "Ba610"

Specifications & Ordering information

Spec. \ Model	"Ba210"	"Ba310"	"Ba610"
Weighing Range max.	210 g	310 g	610 g
Read-Out [d] & Reproducibility. g	0.01 g & 0.01 g		
Linearity. g	0.01 g		
Weighing Mode	Gram, Metric, Carat		
Weighing Plate. mm	120×130 mm Stainless-steel		
Color	Light Grey-color		Silver-color
Dimension & Weight	170×250×h65 mm, and 0.8 kg		
Packing & Gross Weight	210×315×h115 mm, and 1.7 kg		
DC Power & AC Adapter	with Rechargeable Battery & AC 220V Adapter		
Cat. No.	DH.Bal8011	DH.Bal8012	DH.Bal8013
Price, Each. ₩			

(2) [d] 0.1g, max.2100~6100g Model, Multi-use Balance

"Ext-CAL"
[d] 0.1g, max.6100g

1-Year Warranty

(2) Multi-use Balance, "Ba6.1k"

Specifications & Ordering information

Spec. \ Model	"Ba2.1k"	"Ba3.1k"	"Ba6.1k"
Weighing Range max.	2100 g	3100 g	6100 g
Read-Out [d] & Reproducibility. g	0.1 g & 0.1 g		
Linearity. g	0.1 g		
Weighing Mode	Gram, Metric, Carat		
Weighing Plate. mm	160×170 mm Stainless-steel		
Color	Light Grey-color		Silver-color
Dimension & Weight	170×250×h65 mm, and 1.0 kg		
Packing & Gross Weight	210×315×h115 mm / 1.9 kg		
DC Power & AC Adapter	with Rechargeable Battery & AC 220 Adapter		
Cat. No.	DH.Bal8015	DH.Bal8016	DH.Bal8017
Price, Each. ₩			

DAIHAN® [d] 0.05g/0.2g, max.300g/1000g Pocket Digital Balance "Bap", 9×14×2.4cm, 400g

With Counting Pcs · %, Function and Leather Case, Pocket-size Body, 포켓 디지털 바란스

"Ext-CAL"
[d] 0.05g, max.300g

1-Year Warranty

Pocket Balance, "Bap300"

■ Made in Korea ***■ CE Certified*** ***■ 1-Year Warranty***

- Ergonomic Design for Intuitive User Interface
- Pcs. Counting & Weighing Mode
- External Calibration
- LCD-display
- Ambient Temperature 5℃~35℃
- Numeric Linearity Calibration
- Included Battery(AAA 1.5V×3Ea)

Specifications & Ordering information

Spec. \ Model	"Bap300"	"Bap1.0k"
Weighing Range. g	max.300g	max.1000g
Weighing Plate. mm	68×85 mm	
Read-Out [d] & Reproducibility. g	0.05 g & 0.05 g	0.2 g & 0.2 g
Material	Body : ABS, Platform : Stainless-steel	
Dimension & Weight	90×140×h24 mm, and 0.4 kg	
Packing & Gross Weight	95×160×h35 mm, and 0.5 kg	
Power Supply	AAA Battery(DC 1.5V)	
Cat. No.	DH.Bal3011	DH.Bal3012
Price, Each. ₩		

DAIHAN® [d] 0.1g/1g, max.610g/6100g Digital Basic Balance "Bap", 10~100 Pcs. Counting
With Pcs. Count · Bargraph · LCD Display, with DC & AC Adapter, **디지털 기본형 바란스**

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***1-Year Warranty*** ■ ***External Calibration***

* Digital Large LCD Display and Ergonomic Design
* 10~100 Pcs. Counting and Bar-graph Display Function
* Material : Stainless-steel Weighing Plate and ABS Resin Body
* AA Battery and AC 230V Adapter for DC Power 12V/300mA
* Easy Operation, Sturdy and Balancing with Level Gauge
* 4× Touch Key : MODE, ZERO, TARE, and ENTER
* Fast Stabilization Time - 3 Seconds
* Permissible Ambient Temp. 5℃~35℃

(1) [d] 0.1g, max.310g/610g Model, Basic Balance

(1) Basic Balance, "Bap610"

Specifications & Ordering information

Spec. \ Model	"Bap310"	"Bap610"
Weighing Range. g	max.310 g	max.610 g
Read-Out [d] & Reproducibility. g	0.1 g & 0.1 g	
Linearity. g	0.1 g	
Weighing Mode	Gram	
Weighing Plate. mm	120×130 mm Stainless-steel	
Color Light	Grey-color	Silver-color
Dimension & Weight	170×250×h65 mm, and 0.8 kg	
Packing & Gross Weight	210×315×h115 mm, and 1.7 kg	
DC Power & AC Adapter	with Rechargeable Battery & AC 220V Adapter	
Cat. No.	DH.Bal8025	DH.Bal8026
Price, Each. ₩		

(2) [d] 1g, max.6100g Model, Basic Balance

(2) Basic Balance, "Ba6.1kS"

Specifications & Ordering information

Spec. \ Model	"Ba6.1kS"
Weighing Range. g	max.6100 g
Read-Out [d] & Reproducibility. g	1 g & 1 g
Linearity. g	1 g
Weighing Mode	Gram
Weighing Plate. mm	160×170 mm Stainless-steel
Color Light	Silver-color
Dimension & Weight	170×250×h65 mm, and 1.0 kg
Packing & Gross Weight	210×315×h115 mm, and 1.9 kg
DC Power & AC Adapter	with Rechargeable Battery & AC 220V Adapter
Cat. No.	DH.Bal8031
Price, Each. ₩	

DAIHAN® [d] 0.1g/1g, max.610g/6100g Simple Weighing Digital Balance "Bas", Compact : 17.5×24×6cm & 600g
Good for Saving Money, with Pcs. Counting, Back Light LCD, Battery, without Adapter, **단순계량 바란스, 계수 기능**

Simple Weighing Digital Balance "Bas610"

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***1-Year Warranty***

* Ergonomic Design for Intuitive User Interface
* Pcs. Counting & Weighing Mode
* Ambient Temperature 5℃~35℃
* Digital LCD with Backlight
* External Calibration
* Numeric Linearity Calibration

Specifications & Ordering information

Spec. \ Model	"Bas610"	"Bas6.1k"
Weighing Range. g	max.610 g	max.6100 g
Weighing Plate. mm	155×155 mm	
Read-Out [d] & Reproducibility. g	0.1 g & 0.1 g	1 g & 1 g
Material	Body : ABS, Platform : Stainless-steel	
Dimension & Weight	175×240×h60 mm, and 0.6 kg	
Packing & Gross Weight	280×180×h80 mm, and 0.8 kg	
Power Supply	DC 9V/300mA / AA×2Ea.	
Cat. No.	DH.Bal8021	DH.Bal8022
Price, Each. ₩		

Innotem® [d] 2g/10g, max.10kg/30kg Rechargeable Waterproof Digital Balance "T-28K", Commercial Use-Approved NEW

With Stainless Steel Tray, Bluetooth Communication Model, Pcs. Counting, 150hr-Run, **충전형 방수 상용바란스**

Waterproof Balance, "T-2810K"

- ***Made in Korea***
- ***CE Certified***
- ***Digital LCD Display***
- ***Pcs. Counting***

∗ Integrated Rechargeable Battery(150hr-Run)
∗ Material : Stainless-steel Platform(230×190 mm) and ABS Resin Body
∗ AC 220V Adapter for DC Power 12V / 1.5A

Specifications & Ordering information

Spec. \ Model	"T-2810K"	"T-2830K"
Weighing Range. g	**max.10kg**	**max.30kg**
Read-Out [d]. g	2g	10g
Reproducibility. g	2g	10g
Linearity. g	2g	10g
Display	LCD, 5 Digit (100×h40mm), Back Light On/Off	
Weighing Mode	g, kg, PCS	
Platform Size. mm	230×190 mm	
Material	Body : ABS, Platform : Stainless-steel Tray	
Dimension & Weight	230×240×h170mm, 2.7kg	
Packing & Gross Weight	350×260×h265mm, 3.6kg	
Electrical Requirements	Adaptor DC 12V/1.5A, 220V/60Hz	
Cat. No.	**I7.T2810**	**I7.T2810**
Price, Each. ₩		

DAIHAN® [d] 0.1g/0.5g, max.32kg/60kg Precision High Capacity Digital Bench Scale "Bah32P" & "Bah60P"

With Pcs. · % · Alarm · Print & Check Function and Rechargeable Battery/Back Light & LCD Display, DC & AC Adapter

정밀 대용량 다기능 바란스, Pcs. **계수 · % · 경보음 · 인쇄 및 체크 기능, 재충전 배터리/백라이트 내장**

Bench Scale, "Bah32P"

Bench Scale, "Bah60P"

- ***Made in Korea***
- ***CE Certified***
- ***1-Year Warranty***
- ***Digital : 3×6 digits LCD display, 20mm Digits, and Sturdy/Ergonomic Design***
- ***7×Touch Key for "Bah32P" : UNIT, PRINT, FUNC., %, LIMIT, TARE, and ZERO***
- ***6×Touch Key for "Bah61P Series" : UNIT, M+, G/N, TARE, ZERO and ON/OFF***
- ***Easy Operation & Multi-Function : Alarm, Check, Counting Pcs., Percent %, and Print. "RS-232C" : Option for "Bah32P", and Standard for "Bah61P" (integrated)***

∗ Integrated Rechargeable Battery(100Hr-Run) and Back Light
∗ Very Fast Stabilization Time : 2 Seconds
∗ Permissible Ambient Temp. −10℃~ +40℃
∗ Material : Stainless-steel Platform and ABS Resin Body
∗ External Calibration ∗ with AC 220V Adapter for DC Power 9V / 850mA

Specifications & Ordering information

Spec. \ Model	"Bah32P"	"Bah60P"
Weighing Range	**max.32kg**	**max.60kg**
Read-Out [d]. g	0.1 g	0.5 g
Reproducibility. g	0.1 g	0.5 g
Linearity. g	0.1 g	0.5 g
RS-232C interface	Option	Integrated
Weighing Plate. mm	225×300 mm	355×320 mm
Dimension & Weight	320×340×h125mm, 3.8kg	355×320×h130 mm, 6.3kg
Packing & Gross Weight	370×440×h210mm, 4.6kg	500×450×h230 mm, 7.3kg
DC Power & AC Adapter	with Rechargeable Battery & AC 220V Adapter	
Cat. No.	**DH.Bal8035**	**DH.Bal8036**
Price, Each. ₩		

DAIHAN® [d] 0.5g/1g, max.15kg/30kg Basic High Capacity Digital Bench Scale "Bah15L" & "Bah30L"

With Pcs. · % · Alarm · Print & Check Function and Rechargeable Battery/Back Light & LCD Display, DC & AC Adapter

기본형 대용량 다기능 바란스, Pcs. 계수 · % · 경보음 · 인쇄 및 체크 기능, 재충전 배터리/백라이트 내장

"Ext-CAL"
[d] 0.5g, max.15kg

1-Year Warranty

Bench Scale, "Bah15L"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***1-Year Warranty***
- ***Digital : 3×6 digits LCD display, 20mm Digits, and Sturdy/Ergonomic Design***
- ***7×Touch Key : UNIT, PRINT, FUNC., %, LIMIT, TARE, and ZERO***
- ***Easy Operation & Multi-Function : Alarm, Check, Counting Pcs., Percent %, and Print. "RS-232C"-Option***

∗ Integrated Rechargeable Battery(100Hr-Run) and Back Light
∗ Very Fast Stabilization Time : 2 Seconds ∗ Permissible Ambient Temp. −10℃~ +40℃
∗ Material : Stainless-steel Platform and ABS Resin Body ∗ External Calibration
∗ with AC 220V Adapter for DC Power 9V / 850mA

Specifications & Ordering information

Spec. \ Model	"Bah15L"	"Bah30L"
Weighing Range. g	max.15kg	max.30kg
Read-Out [d]. g	0.5 g	1 g
Reproducibility. g	0.5 g	1 g
Linearity. g	0.5 g	1 g
Weighing Plate. mm	225×300 mm	
Dimension & Weight	320×340×h125 mm, 3.8 kg	
Packing & Gross Weight	370×440×h210 mm, 4.6 kg	
DC Power & AC Adapter	with Rechargeable Battery & AC 220V Adapter	
Cat. No.	DH.Bal8041	DH.Bal8042
Price, Each. ₩		

DAIHAN® [d] 5g/10g, max.60kg/150kg High Capacity Multi-func. Digital Platform Scale "Bab60" & "Bab150"

With Pcs. · Alarm · Back Light · Rechargeable Battery & AC Adapter, **대용량 다기능 벤치 바란스**

"Ext-CAL"
[d] 5g, max.60kg

1-Year Warranty

Platform Scale, "Bab60"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***1-Year Warranty***
- ***Digital : 6 Digits, LCD-display, 24mm Digits***
- ***Sturdy Ergonomic Design***
- ***Easy Operation and Multi Function : Pcs. Count, Weighing Alarm, Weight Storage/Plus/Call, and Auto-TARE***

∗ Integrated Rechargeable Battery & Back Light
∗ Very Fast Stabilization Time : 1 Sec.
∗ Permissible Ambient Temp. −10℃~ +40℃
∗ Automatic External Calibration
∗ Material : Stainless-steel Platform, ABS Resin Indicator
∗ with AC 220V Adapter for DC Power 9V/800mA

Specifications & Ordering information

Spec. \ Model	"Bab60"	"Bab150"
Weighing Range	max.60kg	max.150kg
Read-Out [d]. g	5 g	10 g
Reproducibility. g	5 g	10 g
Linearity. g	5 g	10 g
Weighing Plate. mm	420×520 mm	
Dimension & Weight	425×675×h755 mm, 14 kg	
Packing & Gross Weight	580×710×h820 mm, 15.9 kg	
DC Power & AC Adapter	with Rechargeable Battery & AC 220V Adapter	
Cat. No.	DH.Bal8045	DH.Bal8046
Price, Each. ₩		

"InBalance™ 200" Portable & Foldable Smart Body Composition Analyzer, Fluid-/Muscle-/Fat-mass measured with 2 Frequency

Can be Connected to any Smart Phone or Tablet with Bluetooth Connection, Internet Connection with Wi-Fi, Web & Mobile service with Cloud

접이식 스마트 체성분분석기, 체수분/체지방/근육량 측정, BMI/체지방율/비만도 판정, 스마트폰 또는 태블릿과 사용(별도구매)

(1) "InBalance™ 200" Smart Body Composition Analyzer, without Smart Phone or Tablet

※ **Note/ You Can Use Own Smart Phone or Tablet Downloading "InBalance" App.**

(2) "InBalance™ 200" Smart Body Composition Analyzer, with Tablet

- ***Made in Korea***
- ***It is Connected to any Smart Phone or Tablet with Bluetooth Connection : User's Own Smart Phone or Tablet could be used with InBalance App, which is Available in Apple App Store and Google Play Store.***
- ***Measuring 20 Bio-impedance Using 2 Frequency (50kHz, 250kHz)***
- ***Tetrapolar 8 Point Tactile Bio-impedance Method***
- ***Overall Obesity Diagnosis using BMI & Body Fat Mass Ratio***
- ***Waist-hip Ratio & Visceral Fat Area Analysis***
- ***Segmental Analysis for Fat & Muscle***
- ***Offers Precise Analysis of Body Compositions in Consideration of Individual Weight, Height, Gender, Age, and Diagnose Obesity.***
- ***Tetrapolar 8-point Tactile BIA Method : 4 each Tactile Points in Hands and Feet, and 2 Frequencies provide more Precise Analytic Results.***
- ***Providing all the Information through mobile App & Web service with Cloud***
- ***Conveniences for Both of User and Admin :***
  - ***Intuitive UI for Self measurement - Offering overall Data for easy Understanding***
  - ***Measured data Management by User Registration***
  - ***Offering Web Program for Membership Management, for Administrator in Hospitals or for Trainers in the Gym (Optional)***

Specifications & Ordering information

Spec. \ Model	"InBalance™ 200" Portable & Foldable
Material Measuring Method	Multi Frequency, Segmental Bioelectrical Impedance Analysis using 2 different Frequency(50kHz, 250kHz) to measure 20 Impedances of 5 Body Segments (trunk, left arm, right arm, left leg, right leg)
Electrode	Tetrapolar 8-point tactile electrodes
Measuring Items	Body Water (Intra-Cellular Fluid, Extra-Cellular Fluid), Mineral, Protein, Body Fat Mass, Fat Free Mass, Weight, Muscle Mass, Skeletal Muscle Mass, Segmental Muscle Mass, BMI(Body Mass Index), Percent Body Fat, Obesity Degree, Waist-Hip Ratio, Visceral Fat Area, Figure type, Body Ratio, Basal Metabolic Rate, Recommended Weight Control, Recommended Fat Control, 1 Day Required/ Recommended Calories, Overall Score, Abdomen Diagnosis, Measuring History, Impedances for each frequency.
Measuring Scope	10 ~ 250kg, 5 ~ 99 year old
Measuring time	Within 10 seconds
Information Service	Mobile App for iOS & Android, Web service (InBalance.co.kr)
Display	Links to tablet (Can be connected to any Smart Phone or Tablet)
Data Storage	Off-line : 100,000 times (built-in memory)
	On-line : unlimited (cloud)
Interface	USB 1 Port, Bluetooth
Dimension(w×d×h) & Weight	490×380×970mm, 10.3kg
Power	100~240V, 50/60Hz, Current : 500㎃
(1) Cat. No. (Only Analyzer)	DH.HBC10200
Price, Each. ₩	
(2) Cat. No. (with Tablet Package-set)	DH.HBC10201
Price, Each. ₩	

* Other Specifications are available upon Customer's Request.

Conveniences for User
: It needs to be connected to any Smart Phone or Tablet

App & Web Service

Registered user can access the recorded measuring data anywhere, anytime.

"InBalance™ 300" Smart Body Composition Analyzer, Fluid-/Muscle-/Fast-mass measured with 4 Frequency

BMI/Body Fat Percentage/Obesity Degree available, 10.1″ LCD, Internet Connection with Wi-Fi, Web & Mobile service with Cloud

스마트 체성분분석기, 체수분/체지방/근육량 측정, BMI/체지방율/비만도 판정, 5~250kHz 4개 주파수 사용

"InBalance™ 300" Smart Body Composition Analyzer

- ***Made in Korea***
- ***It is Connected to any Smart Phone or Tablet with Bluetooth Connection : User's Own Smart Phone or Tablet could be used with InBalance App, which is Available in Apple App Store and Google Play Store.***
- ***Measuring 20 bio-impedance Using 4 Frequency (5, 50, 100, 250kHz)***
- ***Tetrapolar 8 point Tactile Bio-impedance Method***
- ***Overall Obesity Diagnosis using BMI & Body Fat Mass Ratio***
- ***Waist-hip Ratio & Visceral Fat area Analysis***
- ***Segmental Analysis for Fat & Muscle***
- ***Offers precise Analysis of Body Compositions in Consideration of Individual Weight, Height, Gender, Age, and Diagnose Obesity.***
- ***Result Display on 10.1″ Wide Screen LCD for User Convenience***
- ***Observation of Changing trend of Physical Status by Accumulated Data***
- ***Internet Connection via LAN or Wi-Fi***
- ***Providing all the Information through Mobile App & Web service with Cloud***
- ***SMART Healthcare Platform based Design : capable of Connection with other Devices or Service***

Specifications & Ordering information

Spec. \ Model	"InBalance™ 300" Smart Body Composition Analyzer
Material Measuring Method	Biological Impedance Analysis with 5, 50, 100, 250 kHz 5 Body parts / 20 Segmental Impedance Values
Electrode	Tetrapolar 8-point Tactile Touch
Measuring Items	Body Water, Intra-Cellular Fluid, Extra-Cellular Fluid, Mineral, Protein, Body Fat Mass, Fat-free Mass, Weight, Muscle Mass, Skeletal Muscle Mass, BMI, Body Fat Percentage, Obesity Degree, Waist-hip Ratio, Visceral Fat Area
Additional Information	Impedances by each different Frequency, Dietary Guide
Measuring Scope	10 ~ 250kg, 5 ~ 149 year old
Measuring time	Within 70 seconds
Information Service	Mobile App for iOS & Android, Web service (InBalance.co.kr)
Display	1280×800 Resolution, 10.1″ IPS Panel with capacitive touch
Data Storage	Off-line : 100,000 times using (built-in memory)
	On-line : unlimited (cloud)
OS	Android
Interface	LAN, Wi-Fi, 4×USB, 2×RS232C
Dimension(w×d×h) & Weight	640×450×1040mm, 30kg
Power	100~240V, 50/60Hz 35VA, Current : 500㎂
Cat. No.	DH.HBC10020
Price, Each. ₩	

* Other Specifications are available upon Customer's Request.

Analysis Result - Print

Analysis Result - Display

DAIHAN® [d] 1mg, max.110g High-performance Moisture Analyzer "WBA-110M", 0.00~ 100.00 %, 40~199℃

With 100g Cali. Weight, Back Light LCD, Counting Func., 3×displays of %(g) / ℃ / Time, & Ext-CAL Program, 초정밀/다용도 수분측정기

"Ext-CAL"

[d] 1mg, max.110g

CE

Included 100g Calibration Weight

2-Year Warranty

High-performance Moisture Analyzer "WBA-110M"

- ***CE Certified***
- ***PL (Product Liability) Insurance***
- ***The Percentage of moisture Content***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Included 100g Calibration Weight***
- ***Store Historical Setting***
- ***Halogen Light Heating***
- ***Stainless-steel Chamber***
- ***Temperature and Time can be Set***
- ***External Calibration***
- ***The Percentage of Dry Residual***
- ***Back Light LCD***
- ***Display after Drying : Moisture(%) - Moisture Content from Wet Weight Dry Content(%) - Dry Weight from Wet Weight ATRO(%) - 100 ~ 999%***

∗ Digital Function, and AC 220V, 50/60Hz Operated

∗ Ambient Temperature 5.0~35℃

∗ Loadcell Sensor

∗ Default and Auto Lock Present Working Mode

∗ Built in RS232C & USB port for Printer

∗ Included 10 Sample Plate

Specifications & Ordering information

Spec. \ Model	"WBA-110M"
Weighing Range. g	**max.110 g**
Weighing Plate. mm	Φ 90 mm
Read-Out [d]. g	1 mg
Reproducibility. g	1 mg
Ambient Temperature	5.0~35℃
Heat Source / Temp. Sensor	Halogen Lamp / PT100 Sensor
Temp. Range / Resolution	40 ~ 199 ℃ / 1 ℃
Moisture Range / Read ability	0.00 ~ 100% / 0.01%
Dry Residual	Range : 0.00 ~ 100.00%, Readability : 0.01%
ATRO	100 ~ 999%, 0 ~ 999%
Timer / Auto-stop	1 ~ 99min(Resolution : 1Sec.) / Auto-stop 0.1~9.9% within 1min.
Number of Storage	15
Calibration	External Calibration, Included 100g Calibration Weight
Display	Digital LCD with Back-Light Function
Power Consumption	400 W
Dimension & Net Weight	180×200×h380 mm / 5.8 kg
Packing Size & Gross Weight	290×305×h440 mm / 6.4 kg
Power Supply & Cord Plug	AC 220V, 50 / 60Hz
Cat. No.	**DH.WBA110M**
Price, Each. ₩	

(1) 10 Sample Plate (Included)

(2) RS-232C Thermal Printer, "WBA-100"

(3) RS-232C Thermal Label Printer, "WBA-420"

Optional Sample Plate

		Pk. Price, ₩
DH.WBA0005	(1) Sample Plate, Φ90 mm×h4mm	10ea

Optional Thermal Printer

∗ Model Name Required for Printer Installaion

		Ea. Price, ₩
SL.WBA.100P	(2) Thermal Printer, Paper Roll, **"WBA-100"** Included Cable Module, 1×Paper Roll	
DH.WBA0084	Thermal Paper Package, 5×Paper Roll, for **"WBA-100"**	
SL.WBA.420P	(3) Thermal Printer, Label Paper Roll, **"WBA-420"** Included Cable Module, 1×Label Paper Roll	
DH.WBA0771	Thermal Label Paper Package, 5×Label Paper Roll, for **"WBA-420"**	

Articles	Cat. No	Description

Kartell® PP Universal Use Weighing Bottle, Transparent, 20~360㎖

Excellent Chemical resistance, Autoclavable, −10℃~+125/140℃, PP 다용도 평량병/샘플병

■ ***Supplied by Kartell® in Italy*** ＊PP(Polypropylene), −10℃ +140℃ Heat-resistant, Autoclavable

(1) Short form, 20~50㎖

		Ea. Price,₩	Pk. Price, ₩
KA.342	20㎖, Φ40×h30mm		10ea
KA.345	30㎖, Φ50×h30mm		10ea
KA.346	50㎖, Φ60×h34 mm		10ea

(2) Tall form, 23~360㎖

		Ea. Price,₩	Pk. Price, ₩
KA.340	23㎖ , Φ30×h50mm		10ea
KA.343	60㎖ , Φ40×h70mm		10ea
KA.347	190㎖, Φ60×h90mm		10ea
KA.348	360㎖, Φ70×h120mm		10ea

Glassco® Glass Universal Use Weighing Bottle, Short- & Tall-form, 7~65㎖ NEW

Excellent Chemical/Mechanical Resistance, with Ground Glass Stopper, 글라스 다용도 평량병/샘플병

■ ***Supplied by SciLab Korea*** ■ ***Complies ASTM 438 Type 1 Borosilicate Glass 3.3***

(1) Short form, 22~55㎖

		Ea. ₩	Pk. Price, ₩
GL.264.202.01	22㎖, Φ40×h30mm		10ea
GL.264.202.03	37㎖, Φ50×h35mm		10ea
GL.264.202.04	55㎖, Φ50×h50mm		10ea

(2) Tall form, 7~65㎖

		Ea. ₩	Pk. Price, ₩
GL.264.202.06	7㎖ , Φ20×h40mm		10ea
GL.264.202.07	17㎖, Φ25×h50mm		10ea
GL.264.202.08	28㎖, Φ30×h60mm		10ea
GL.264.202.09	65㎖, Φ40×h80mm		10ea

Kern® Reusable Aluminum Weighing Dish, Φ90mm, 알루미늄 평량 디쉬, 수분측정에 적합

■ ***Supplied by Kern® in Germany***

＊Good for General Weighing, Sampling, Testing and Moisture Drying Application for Moisture Analyzer

		Pk. Price, ₩
KE.MLB.A01	Al.Sample Dish, Φ90mm, 80pcs/Pk.	80ea

Wheaton® Micro-weighing Dish, Reusable Aluminum, 0.5 & 2.2㎖, 알루미늄 미량 디쉬

■ ***Supplied by Wheaton® in USA*** ＊For Analytical Balance, Φ11 & 20mm

		dh pk. Price, ₩	Cs. Price, ₩
WH.370790	Weighing Dish, 0.5㎖, Φ11×h6 mm, 0.15 g/pcs	10ea	1000ea
WH.370792	, 2.2㎖, Φ20×h8 mm, 0.45 g/pcs	10ea	1000ea

Disposable Aluminum Weighing Dish, 23~67㎖, 일회용 알루미늄 디쉬, 손잡이부

■ ***Supplied by LMS® in Japan*** ＊with Finger-grip Handle

		Pk. Price, ₩
AS5.075.05	Dish, Al.23㎖, Φ51/45×h12mm	100ea
AS5.075.06	, Al.38㎖, Φ60/53×h15mm	100ea
AS5.075.07	, Al.67㎖, Φ77/71×h16mm	100ea

Disposable PS Anti-Static Weighing Dish, 9~355㎖, 일회용 PS 평량디쉬, 정전기방지용

■ ***Supplied by Simport® in Canada*** ＊Use : Sampling for Liquid and Solid and Powder, Easily Transformed into Funnel-form

＊Made of Polystyrene, -10℃~+70/80℃ ＊Anti-static : Suitable for Clean Room Dish in Electronic / Semiconductor Field

(1) Square-type

		Pk. Price,₩	Cs. Price, ₩
SP.D250.1	Dish, Square type, 10㎖ , 40×40×h8mm	500ea	8pk
SP.D250.2	, 100㎖, 78×78×h25mm	500ea	
SP.D250.3	, 330㎖, 127×127×h25mm	500ea	

(2) Boat-type, Pour Dish

		Pk. Price,₩	Cs. Price, ₩
SP.D251.1	Dish, Boat type, 12㎖ , 50×37×h8mm	250ea	8pk
SP.D251.2	, 140㎖, 128×76×h25mm	250ea	
SP.D251.3	, 270㎖, 180×117×h25mm	250ea	

(3) Hexagonal-type

		Pk. Price,₩	Cs. Price, ₩
SP.D252.1	Dish, Hexagonal type, 9㎖ , Top i.d. 35mm , Base i.d.25mm	500ea	8pk
SP.D252.2	, 58㎖ , Top i.d. 70mm , Base i.d.47mm	500ea	
SP.D252.3	, 203㎖, Top i.d.115mm, Base i.d.85mm	500ea	
SP.D252.4	, 355㎖, Top i.d.130mm, Base i.d.95mm	500ea	

Articles	Cat. No	Description

Kartell® Disposable PS Black Weighing Dish, 5~100㎖, 일회용 PS 평량디쉬, 흰색시료용

■ ***Supplied by Kartell® in Italy*** ＊Made of Polystyrene, -10℃~+70/80℃

		Pk.	Price,₩	Cs.	Price, ₩
KA.11100.09	Dish, Diamond-type, Black, 5㎖ , 55×31×h5mm	250ea		4pk	
KA.11101.09	, 30㎖ , 85×56×h15mm	250ea		2pk	
KA.11102.09	, 100㎖, 135×96×h19mm	250ea			

Low-Nitrogen Weighing Paper, 평량지 / 유산지

■ ***Made in Korea***

＊Ideal for Chemical, Medical, Laboratory

＊Perfect Surface Treatment : Powder Samples were not Asked

＊No Dust / Absorptiveness

		Pk.	Price, ₩
DH.WEP001	Weighing Paper, 80×80mm	500sheet	
DH.WEP002	, 100×100mm	500sheet	
DH.WEP003	, 150×150mm	500sheet	

Lab Bristle Brush, For Cleaning Balance, Wood Handle with Metal Ferrule, 랩 브러쉬

■ ***Made in Korea***

		Ea.	Price, ₩
S24.178.2	Brush, Bristle Φ19×L52 mm, overall 28cm		
S24.178.3	, Bristle Φ24×L56 mm, overall 30cm		

(1) BC.1740

Stainless-steel Weighing Forcep, with Plastic Tip, Finished Surface, MP 1,400℃, L100mm
Ideal for Handling Precision Weight, Non-Magnetic 18/10 Stainless-steel, 비자성스텐 웨잉포셉

(1) Bochem® Hi-grade Forcep/Germany

		Ea. Price,₩
BC.1740	Forcep, L100mm	

(2) Forcep/SciLab Korea

		Ea. Price,₩
SL.For7089	Forcep, L100mm	

Micro Spoon-Spatula, Bowl 3×5~5×9, L150~200mm, 마이크로 스패츌러-스푼

■ ***Supplied by SciLab Korea*** ＊Made of Non-magnetic 18/10 Stainless-steel, Rustless

		Ea.	Price, ₩
SL.Spa7011	Micro Spoon-Spatula, L150, Bowl-3×5, Blade-5×50, Stem-Φ2.5 mm		
SL.Spa7012	, L150, -5×7, -5×50, -Φ2.5 mm		
SL.Spa7013	, L180, -5×9, -5×50, -Φ2.5 mm		
SL.Spa7014	, L200, -5×9, -5×50, -Φ2.5 mm		

Hammacher® Hi-grade Stainless-steel Spoon-Spatulas, L150~230mm, 스패츌러-스푼

■ ***Made in Germany*** ＊Made of "Rostfrei" 18/8 Stainless-steel, Rustless, 1400℃

		Ea.	Price, ₩
HA.HSN133.15	Spoon-Spatula, L150, Blade - 10×50, Spoon - 17×38, Stem-Φ3mm		
HA.HSN134.18	, L180, - 10×55, - 17×38, -Φ3mm		
HA.HSN135.21	, L210, - 10×60, - 17×38, -Φ3mm		
HA.HSN136.23	, L230, - 10×60, - 17×38, -Φ4mm		

Half-rounded Scoop-Spatula, L130~210mm, 스쿠프-스패츌러

■ ***Supplied by SciLab Korea*** ＊Made of Non-magnetic 18/10 Stainless-steel

		Ea.	Price, ₩
SL.Sco7001	Scoop-Spatula, STS, L130, Blade-9×40, Stem-Φ3.7mm		
SL.Sco7002	, L150, -9×45, -Φ3.3mm		
SL.Sco7003	, L185, -9×50, -Φ3.3mm		
SL.Sco7004	, L210, -9×50, -Φ3.3mm		

(1) Stainless-steel Vibration Spatula

(2) PTFE-coated Vibration Spatula

High-grade Vibro-Scoop with Adjusting Knob, with Plastic-handle, L190/220mm
Ideal for Handling High Value Materials, Non-Magnetic 18/10 Stainless-steel, 고품질 진동 스쿠프

■ ***Made in Germany*** ＊Ideal for Use with Balance or Handling High Value Materials

＊Adjustable Sample Offering with the Adjusting Knob

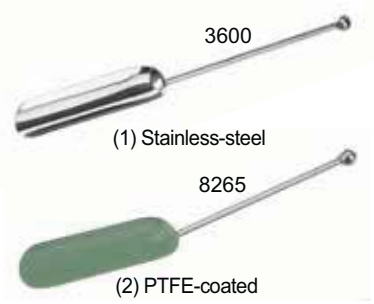
(1) Bochem® Stainless-steel Vibro-Spatula, with Plastic-handle, L190mm

		Ea.	Price, ₩
BC.3540	Vibro Scoop, STS, L190, Blade -12×50mm		

(2) Hammacher® PTFE-coated Vibro-Spatula, with Plastic-handle, L220mm

＊Teflon-PTFE : Anti-Acid / Alkally / Chemicals/ Corrosion, MP 260℃

		Ea.	Price, ₩
HA.HSN462.22	PTFE-coated Vibro Scoop, L220, Blade -7×80mm		



(1) Stainless-steel

(2) PTFE-coated

Bochem® High-grade Weighing Scoop, L 200~250mm, 고품질 비자성 웨잉 스쿠프

■ ***Made in Germany***

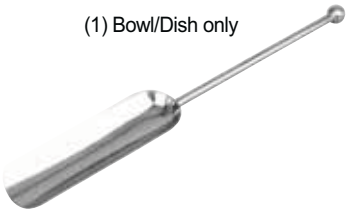
(1) Non-Magnetic 18/10 Stainless-steel, L200~250mm, MP 1,400℃

		Ea.	Price, ₩
BC.3600	Weighing-Scoop, STS, L 200, Head-31×70 , Stem-Φ5 mm, 30g		
BC.3602	, L 235, -31×105, -Φ5 mm, 35g		
BC.3603	, L 250, -31×120, -Φ5 mm, 40g		

(2) PTFE-Coated, L235mm, MP 260℃

		Ea.	Price, ₩
BC.8265	PTFE-coat. Weighing-Scoop, L235, Head-31×105, Stem-Φ5 mm, 39g		

(1) Bowl/Dish only



(2) with Handling Stem

Stainless-steel Weighing Scoop, L70~250mm, 경제형 웨잉 스쿠프

■ ***Supplied by SciLab Korea*** ＊Made of Non Magnetic 18/10 Stainless-steel (STS), Melting-point 1,400℃

(1) Bowl/Dish only, without Handling Stem, L70~120mm

		Ea.	Price, ₩
SL.Sco7031	Weighing Scoop, Dish, STS, Dish-32×70mm , 13g		
SL.Sco7032	, Dish-32×90mm , 18g		
SL.Sco7033	, Dish-32×105mm, 23g		
SL.Sco7034	, Dish-32×120mm, 26g		

(2) with Handling Stem, L200~250mm

		Ea.	Price, ₩
SL.Sco7036	Weighing Scoop, Handled, STS, Bowl-31×70 , Overall-L200mm, 29g		
SL.Sco7037	, Bowl-31×90 , -L220mm, 33g		
SL.Sco7038	, Bowl-31×105, -L235mm, 45g		
SL.Sco7039	, Bowl-31×120, -L250mm, 48g		

Aluminium Weighing Scoop

Bochem® Aluminium Weighing Scoop, L70~120mm, 알루미늄 웨잉 스쿠프, 경량

■ ***Made in Germany*** ＊Light-Weight(Sp. 2.7g/cm³)

		Ea.	Price, ₩
BC.12810	Alumi-Weighing Scoop, Φ32×L 70mm		
BC.12811	, Φ32×L 90mm		
BC.12812	, Φ32×L105mm		
BC.12813	, Φ32×L120mm		

Weighing Spoon Set, STS410, 15㎖ & 5㎖, 스텐 평량 스푼세트(대+소)

■ ***Supplied by LMS® in Japan*** ＊Large(15㎖ ×165mm)+Small(5㎖ ×135mm)

		Set.	Price, ₩
AS5.5664.01	Weighing Spoon Set, STS410, 15㎖ / 5㎖, L165mm / L135mm	2ea	

Glass Weighing Scoop, 3 · 6 · 10㎖, Easy to Use, Boro-glass 3.3, Glass 평량 스쿠프

■ ***Supplied by SciLab Korea*** ＊with open Tubular Arm for the Filling of Powder into Narrow Mouth Bottles/Vessels
＊with Flat Bottom for Safety Location

		Ea.	Price,₩	Pk.	Price, ₩
SL.Sco1011	Weighing Scoop, Glass, 3㎖ , L(approx)-65mm			10ea	
SL.Sco1012	, 6㎖ , -80mm			10ea	
SL.Sco1013	, 10㎖, -95mm			10ea	

(1) White PP 2~1000㎖

(2) Colored PP 100㎖

VITLAB® PP Colored Measuring Scoop, Flat-top, Autoclavable, 2~1,000㎖

For Liquid/Powder/Solid, 0℃~+125/140℃ withstand, PP 칼라 계량 스쿠프, 액체/고체겸용

■ ***Made in Germany*** ＊121 ℃ Autoclavable PP(Polypropylene), Good Chemical & Temp-Resistance
＊Multi-Use : Free-Standing and Flat-Top Construction for Liquids/Powders/Solids Also suitable as Weighing scoops.
＊Easily Readable Volume Quantities on the Upper Side of the Handle.

(1) White 2~1000㎖

			Ea. ₩	Cs. Price, ₩
VI.391.94	2㎖	, L60mm		12ea
VI.392.94	5㎖	, L82mm		12ea
VI.393.94	10㎖	, L100mm		12ea
VI.394.94	25㎖	, L135mm		12ea
VI.395.94	50㎖	, L160mm		12ea
VI.396.94	100㎖	, L200mm		12ea
VI.397.94	250㎖	, L260mm		6ea
VI.398.94	500㎖	, L315mm		6ea
VI.399.94	1,000㎖	, L385mm		6ea

(2) Colored 100㎖

＊L200mm

			Ea. ₩	Cs. Price, ₩
VI.3969.43	100㎖	, Gray		12ea
VI.3969.52		, Green		12ea
VI.3969.40		, Red		12ea
VI.3969.46		, Yellow		12ea

DAIHAN Scientific

Bath & Bath Circulator

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Bath, Basic-type, 100℃ ····· P. 27
, 250℃ ····· P. 28
, Cold Trap ····· P. 29
, Extraction Water Bath ····· P. 30
, Shaking Water Bath ····· P. 31
, Viscosity ····· P. 32
Bath Circulator, Circulation Water Bath ····· P. 33
, High-Temp. Bath Circulator ····· P. 34
, Refrigerated / Heating Bath Circulator ··· P. 35~36
Accessory, Transfer Fluid & Circulation Hose ····· P. 37

Basic-type Bath
"WB" 6 · 11 · 22 Lit, 100℃

Shaking Water Bath
"MaXturdy™" 18 · 30 · 45 Lit, 100℃

Circulation Water Bath
"WCB" 6 · 11 · 22 Lit, 100℃

Refrigerated / Heating Bath Circulator
"MaXircu™ CL" 8 · 12 · 22 · 30 Lit, -35 ~ +150℃

Articles	Cat. No	Description

DAIHAN® Digital General Purpose Water Bath "WB", 6 · 11 · 22 Lit, up to 100℃, ±0.1℃

With Digital Fuzzy Control System, Stainless-steel Flat Lid, and Back Light LCD, with Certi. & Traceability

정밀 범용 항온수조, 디지털 퍼지 제어 시스템, 스텐리스 스틸 리드 포함

Digital Precise Water Bath, 11Lit, "WB-11"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

* User's Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0℃).
* 304 Stainless-steel Bath & Lid for Superior Durability & High Thermal Efficiency/Constant.
* Digital Timer Function(99hr 59min) : 'Delay Time' and 'Operation Time' can be Controlled.
* Storage Function for the Set Values of Temperature and Timer.
* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

Specifications & Ordering information

Spec. \ Model		"WB-6" Max. Capa. 6Lit	"WB-11" Max. Capa. 11Lit	"WB-22" Max. Capa. 22Lit
Capacity		6 Lit	11 Lit	22 Lit
Temp. Range & Accuracy		Room Temp.+5℃~100℃, ±0.1℃		
Temp. Resolution		0.1℃-Display, 0.1℃-Control		
Temp. Uniformity & Probe		±1.0℃, PT100		
Heating Power		800 W	1 kW	2 kW
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog - Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp. / -Current protection, Sensor Error Detection		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External		
Lid		included Stainless-steel Flat Lid, Optional Dome Lid		
Drain Valve		None		Mounted(Φ9.5~11mm)
Dimension (w×d×h)	Effective Space	300×155×h110mm	302×240×h110mm	500×295×h110mm
	Internal	300×155×h150mm	302×240×h150mm	500×295×h150mm
	External	325×180×h260mm	325×265×h260mm	535×330×h260mm
Packing Size (mm) and Gross Weight (kg)		350×210×h310mm, 8 kg	350×300×h310mm, 10 kg	570×360×h310mm, 14 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WB000106	DH.WB000111	DH.WB000122
	120V	DH.WB000206	DH.WB000211	DH.WB000222
Price, Each. ₩				

* **Other Specifications are available upon Customer's Request.**

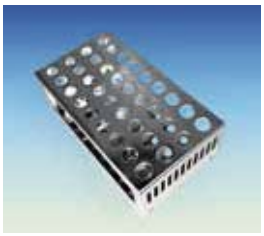
(1) Flat Lid, Stainless-steel (Included)

(2) Dome Lid, Stainless-steel

(3) "BFC106"
Lid with Concentric Ring Cover Sets for 6Lit

(4) "BFC111"
Lid with Concentric Ring Cover Sets for 11Lit

(5) "BFC122"
Lid with Concentric Ring Cover Sets for 22Lit Bath



(6) Test Tube Rack, Stainless-steel

Optional Lid and Tube Rack, Stainless-steel

		Ea. Price, ₩
DH.WB010206	(2) Dome Lid, for **6 Lit,** 324×176×h100mm, **"BD206"**	
DH.WB010211	, for **11 Lit,** 324×263×h100mm, **"BD211"**	
DH.WB010222	, for **22 Lit,** 533×328×h100mm, **"BD222"**	
DH.WB030106	(3) Lid with 2×Concentric Ring Cover Sets, for **6 Lit,** Stainless-steel, 330×182×h20mm, **"BFC106"**	
DH.WB030111	(4) Lid with 2×Concentric Ring Cover Sets, for **11 Lit,** Stainless-steel, 329×269×h20mm, **"BFC111"**	
DH.WB030122	(5) Lid with 6×Concentric Ring Cover Sets, for **22 Lit,** Stainless-steel, 539×334×h20mm, **"BFC122"**	
DH.WB020106	(6) Tube Rack, for **6 Lit,** 36Hole×Φ17mm, **"BTH106",** Stainless-steel, 220×125×h78.5mm	
DH.WB020206	(6) Tube Rack, for **6 Lit,** 15Hole×Φ32mm, **"BTH206",** Stainless-steel, 220×125×h78.5mm	
DH.WB020111	(6) Tube Rack, for **11 Lit,** 63Hole×Φ17mm, **"BTH111",** Stainless-steel, 220×205×h78.5mm	
DH.WB020211	(6) Tube Rack, for **11 Lit,** 25Hole×Φ32mm, **"BTH211",** Stainless-steel, 220×205×h78.5mm	

Water Bath with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WB040106	Validation Service(IQ, OQ), with "WB-6" , **"BV106"**	
DH.WB040111	, with "WB-11", **"BV111"**	
DH.WB040122	, with "WB-22", **"BV122"**	

Articles	Cat. No	Description

DAIHAN® Digital High Temperature Oil Bath "WHB", 6 · 11 · 22 Lit, up to 250℃, ±1.5℃

With Stainless-steel Flat Lid, Digital Fuzzy Control System, Back Light LCD, with Certi. & Traceability

정밀 고온 오일 배스, 디지털 퍼지 제어 시스템, 스텐리스 스틸 리드 포함

Digital High Temperature Oil Bath, 11Lit, "WHB-11"

Included Flat Lid, Stainless-steel

- ***Made in Korea.*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance.***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy.***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function.***

∗ Rustless 304 Stainless-steel Bath having 1.2mm & Ceramic Fiber Insulator of 50mm Thickness.
∗ User's Self-Compensation Function to Control Difference between Real Temp. and Indicated Temp.
∗ Storage Function for the Set Values of Temperature & Timer.
∗ Alarm & Digital Timer : 'Delay Time' and 'Operation Time' can be Controlled.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

Specifications & Ordering information

Spec. \ Model		"WHB-6" Max. Capa. 6Lit	"WHB-11" Max. Capa. 11Lit	"WHB-22" Max. Capa. 22Lit
Capacity		6 Lit	11 Lit	22 Lit
Temp. Range & Accuracy		Room Temp +5℃ to 250℃, ±1.5℃		
Temp. Uniformity & Probe		±3.0℃, PT100		
Heating Power		1.5 kW	2.0 kW	2.5 kW
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 50 mm Thickness Ceramic Fiber-Insulation		
Lid		Stainless-steel Flat Lid Included		
Drain Valve		Mounted		
Dimension (w×d×h)	Effective Space	270×180×h110 mm	300×250×h110 mm	400×300×h140 mm
	Mounted	270×180×h150 mm	300×250×h150 mm	400×300×h180 mm
	External	425×305×h340 mm	425×375×h340 mm	525×425×h370 mm
Packing Size (mm) & Gross Weight		470×400×h500 mm, 23 kg	600×490×h500 mm, 25 kg	600×490×h500 mm, 39 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz		
Cat. No.	230V	DH.WHB00106	DH.WHB00111	DH.WHB00122
	120V	DH.WHB00206	DH.WHB00211	DH.WHB00222
Price, Each. ₩				

∗ **Other Specifications are available upon Customer's Request.**

High-Temp. Oil Bath with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WHB40106	Validation Service(IQ, OQ), with **"WHB-6", "HBV106"**	
DH.WHB40111	, with **"WHB-11", "HBV111"**	
DH.WHB40122	, with **"WHB-22", "HBV122"**	

※ See page 37 for the Heating Transfer Fluid ;
▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid
▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid

DAIHAN® Digital Precision Cold Trap Bath "WCT", −40 & −80℃, 10 Lit, with Certi. & Traceability

With 2 Glass Cold Trap, Digital PID Control System, Back-Light LCD, CFC-free Refrigeration System, 초저온 동결 트랩

Digital Precision Cold Trap Bath "WCT"

(1) Glass Cold Trap "CTG1000"

※DAIHAN Recommendation : Combination of the Cold Trap Bath(WCT) with the Vacuum Oven and Vacuum Pump.

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital PID Controller***
- ***CFC-free (R-404A) Refrigeration System***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

∗ Ideal for exceptional Cooling System like Collecting Evaporation Vapor or Hazardous Vapor from Vacuum Line.
∗ Durable Stainless-steel Bath and Powder Coated steel
∗ Digital Timer Function : 'Delay Time' and 'Operation Time' : Can be Controlled.
∗ User's Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

Spec. \ Model		"WCT-40" Max. Temp. −40℃	"WCT-80" Max. Temp. −80℃
Temperature Range		−40℃ ~ −20℃	−80℃ ~ −65℃
Bath Volume		10 Lit	
Bath Volume & Cold Trap Type		Stainless-steel 304, 2 Glass Trap	
Refrigerator		1/2 HP	1 HP
Power Consumption		900 W	1.8 kW
Refrigerator & Refrigerant		R-404A	HFC
Display		Digital LCD with Back-Light Function	
Controller		PID Controller with Jog-Shuttle Switch (Turn+Push)	
Drain Valve		Mounted	
Safety Circuit		Over Current protection, Sensor Error Detection, Leakage Breaker	
Material		Stainless-steel (#304)-Internal, Powder Coated steel, 1.2t, Doublepaint & Baked-External, 20 mm Thickness Polyurethane-Insulation	
Dimension (w×d×h)		220×220×h210 mm-Internal, 377×453×h705 mm-External	
Cold Trap Inlet Valve Size		od. 10 mm	
Packing Dimension (mm) and Gross Weight (kg)		560×500×h1,010, 67 kg	680×640×h1,130, 90 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz	
Cat. No.	230V	DH.WCT00140	DH.WCT00180
	120V	DH.WCT00240	DH.WCT00280
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 16,000 별도!

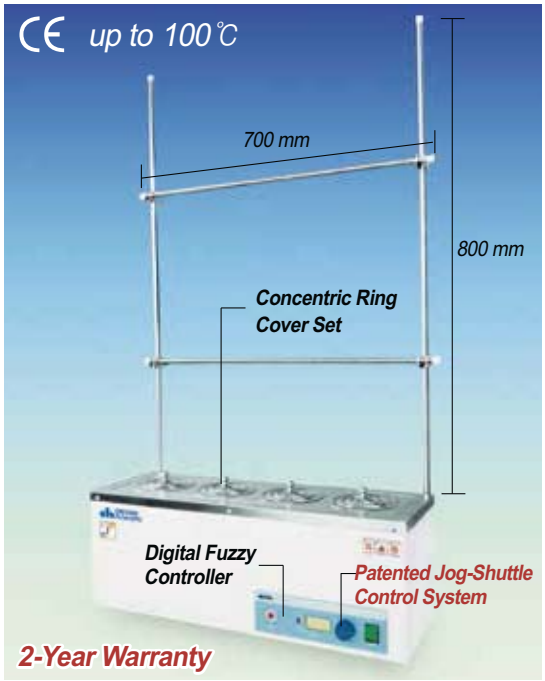
Spare Glass Cold Trap

		Ea. Price, ₩
DH.WCT11000	(1) 1×Glass Cold Trap, Φ106×h249mm, **"CTG1000",** DURAN® Borosilicate Glass α3.3, Safety-Pressure, Resistant 1.5bar at 250℃, for **"WCT"**	

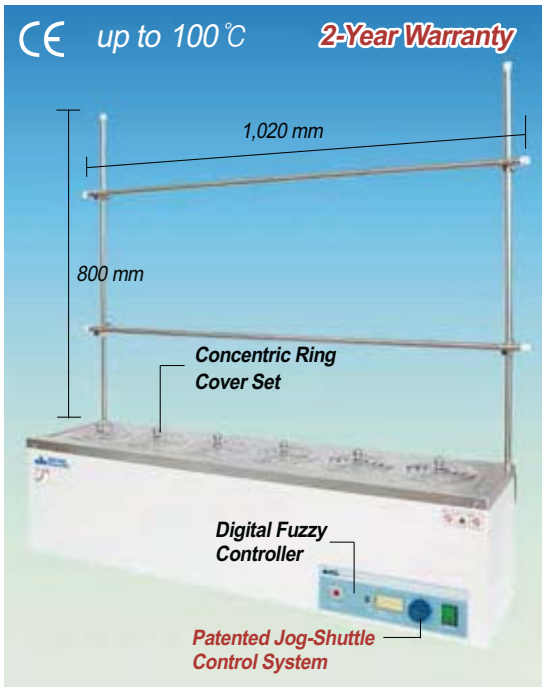
DAIHAN® Extraction Water Bath "WEB", Multi-purpose, 4 · 6 · 8 Place, with Certi. & Traceability

With Concentric Ring Cover Sets & Holding Frame, Digital Fuzzy Control, Back Light LCD, up to 100℃, ±0.2℃

다용도 추출용 항온수조, 4 · 6 · 8 구, 컨센트릭 링 커버 세트 & 홀딩 프레임 포함



4-Place Extraction Water Bath "WEB-4"



6-Place Extraction Water Bath "WEB-6"

(1) Lid with Concentric Ring Cover Set (Included)

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Gentle Extraction, Soxhlet Extraction and Determination of COD***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Concentric Ring Cover Sets make Effective Steaming Work***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

∗ 4 · 6 · 8 Extraction Place are available.
∗ Included Concentric Ring Cover Set & Holiding Frame
∗ User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0℃).
∗ High Quality 304 Stainless-steel Bath and Holding Frame for Superior Durability.
∗ Storage Function for the Set Values of Temperature and Timer.
∗ Alarm Function : Error Status and Timer-end.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

Specifications & Ordering information

Spec. \ Model		"WEB-4" 4 Place	"WEB-6" 6 Place	"WEB-8" 8 Place
Temp. Range & Accuracy		Room Temp. +5 ℃ to 100 ℃, ±0.2℃		
Temp. Uniformity & Sensor		±1.0℃, PT100		
No. of Extraction Holes		4 Place	6 Place	8(4×2) Place
Heating Power		1.4 kW	1.8 kW	1.4 kW×2
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, Stainless-steel Holding Frame		
Flask Capacity		250 ~ 500ml Flask		
Lid		Concentric Ring Cover Set Included		
Top Opening Dia.		Φ36 · Φ65 · Φ96 · Φ110mm		
Bath Depth		122mm		
Drain Valve		Mounted		
Dimension (w×d×h)	Internal	610×160×h160 mm	910×140×h160 mm	610×290×h160 mm
	External	680×245×h275 mm	975×245×h275 mm	720×375×h275 mm
Packing Size (mm) and Gross Weight (kg)		1,100×350×h400, 18 kg	1,250×350×h400, 25 kg	900×450×h400, 34 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz		
Cat. No.	230V	DH.WEB01004	DH.WEB01006	DH.WEB01008
	120V	DH.WEB02004	DH.WEB02006	DH.WEB02008
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

Spare Lid with Concentric Ring Cover Set and Holding Frame Set

		Ea. Price, ₩
DH.WEB11000	(1) Lid with Concentric Ring Cover Set, **"EBC100"**, for all **"WEB"** models	
DH.WEB21004	Holding Frame Set, **"EBF100"**, for **"WEB-4"**, 2ea×800mm Pole & 2ea×700mm Pole	
DH.WEB21006	Holding Frame Set, **"EBF200"**, for **"WEB-6"**, 2ea×800mm Pole & 2ea×1,020mm Pole	
DH.WEB21008	Holding Frame Set, **"EBF300"**, for **"WEB-8"**, 4ea×800mm Pole & 4ea×740mm Pole	

DAIHAN® Digital Precise Shaking Water Bath "MaXturdy™", Reciprocating Motion, 18 · 30 · 45 Lit

With Universal Spring Rack, Digital Fuzzy Control, up to 2 Lit Flask, 20~250 rpm, up to 100℃, ±0.1℃, with Certi. & Traceability

정밀 진탕 항온수조, 왕복 진탕 운동, 디지털 피드백 제어, 고성능 쉐이킹 엔진 탑재

Digital Precise Shaking Water Bath Max. 30Lit, "MaXturdy™ 30"

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Digital Fuzzy Controller Provides Precise Temperature Control***
- ■ ***Digital Feedback Controller Provides Precise Speed Control***
- ■ ***Hi-Performance Shaking Engine ensures Best Smoothly Shaking Motion and Minimum Noise and Vibration***
- ■ ***Easy to Disassemble Spring Rack for Cleaning***
- ■ ***Patented Shaking Mechanism : Minimum Noise and Vibration***
- ■ ***Patented Jog-Dial Control System and Digital LCD with Back-Light***

* Ideal for Direct Immersion of Samples or Shaking in the Field of Biotechnology and Laboratories.
* Hybridization Applications, Cell Cultures, Cell Aeration, Increasing Solubility Rates, Molecular Biology Assays, Bacterial Cultures
* Stainless-steel Bath for Superior Durability & High Thermal Efficiency
* Universal Stainless-steel Spring Rack Included : for various kind of Flasks and Tubes (up to 2 ℓ)
* User's Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0℃)
* Over Temp., Over Current Protection and Sensor Error Detection
* Digital Timer Function : 'Delay Time' and 'Operation Time' : Can be Controlled

(1) Universal Spring Rack (Included)

(2) Dome Lid, Stainless-steel (Optional)

Specifications & Ordering information

Spec. \ Model		"MaXturdy™ 18" Max. Capa. 18Lit	"MaXturdy™ 30" Max. Capa. 30Lit	"MaXturdy™ 45" Max. Capa. 45Lit
Capacity		18 Lit	30 Lit	45 Lit
Max.Q'ty of Erlenmeyer Flask		250 ml×6 ea, 500 ml×4 ea, 1000 ml×1 ea	250 ml×10 ea, 500 ml×8 ea, 1000 ml×3 ea	250 ml×18 ea, 500 ml×15 ea, 1000 ml×8 ea
Temp. Range & Accuracy		Room Temp. +5℃ to 100 ℃, ±0.1℃		
Temp. Resolution		0.1℃-Display, 0.1℃-Control		
Temp. Uniformity & Probe		±0.5℃ , PT100		
Heating Power		1.4 kW	1.8 kW	2.4 kW
Shaking Speed & Resolution		20 ~ 250 rpm, 1rpm-Display/1rpm-Control		
Shaking Stroke (mm)		15, 20, 30 Available (20 as factory Default)		
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller Digital		Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection		
Rack		Included Stainless-steel Spring Rack : Universal-type		
Drain Valve		Mounted		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External		
Dimension (w×d×h)	Internal (mm)	300×300×h200	500×300×h200	600×380×h200
	External (mm)	563×353×h340	763×353×h340	863×433×h340
Packing Size (mm) & Gross Weight (kg)		620×420×h450, 24 kg	820×420×h450, 26 kg	920×500×h450, 32 kg
Electric Reqts.		1 Phase, AC 120V, 60 Hz or 230V, 50 / 60Hz		
Cat. No.	230V	DH.WSB03018	DH.WSB03030	DH.WSB03045
	120V	DH.WSB03218	DH.WSB03230	DH.WSB03245
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 16,000 별도!

Spare Universal Spring Rack

		Ea. Price, ₩
DH.WSB51018	(1) Spring Rack, for **18 Lit**, 245×270×h110mm, **"SBR018"**	
DH.WSB51030	, for **30 Lit**, 445×270×h110mm, **"SBR030"**	
DH.WSB51045	, for **45 Lit**, 545×350×h110mm, **"SBR045"**	

Optional Stainless-steel Dome Lid

		Ea. Price, ₩
DH.WSB02018	(2) Dome Lid, for **18 Lit**, 363×353×h69mm, **"SBD018"**	
DH.WSB02030	, for **30 Lit**, 563×353×h69mm, **"SBD030"**	
DH.WSB02045	, for **45 Lit**, 663×433×h69mm, **"SBD045"**	

Shaking Water Bath with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WSB31018	Validation Service(IQ, OQ), with "MaXturdy 18", **"SBV018"**	
DH.WSB31030	, with "MaXturdy 30", **"SBV030"**	
DH.WSB31045	, with "MaXturdy 45", **"SBV045"**	

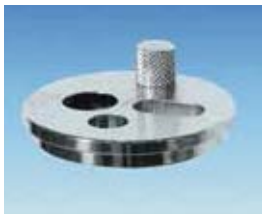
DAIHAN® Digital Precise Viscosity Bath "WVB", Useful 5×Viscometer, Max. 30Lit/min, up to 100℃, ±0.1℃

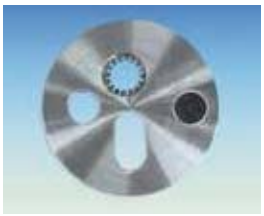
With 5 Holes Stainless-steel Lid for Viscometer Holder, Available Reverse & Routine-type Viscometer, Transparent Window

투시형 정밀 점도 항온수조, 5×점도계 사용가능, 디지털 퍼지 제어 시스템, 5-구 스텐리스 스틸 리드포함

Max. 30Lit/min Viscosity Bath "WVB-30", included Flat Lid for Viscometer Holder (without Viscometer Holder)

Flat Lid with Viscometer Holder





(1) Viscometer Holder "WVB02010" (Optional)

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Used for Precise Measurement with Capillary Viscometers***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Powerful Circulation Pump ensures Highest Uniformity of Temperature***
- ***Viscometer Holder : Available Reverse & Routine-type Viscometer***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function.***

∗ Stainless-steel(#304) made inner bath
∗ Stainless-steel Lid Contains Five Holes for Insertion of Viscometer Holders
∗ User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature
∗ Storage Function for the Set Values of Temperature and Time
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
∗ Included Flat Lid for Viscometer(without Viscometer Holder)
∗ Over Temp., Over Current Protection and Sensor Error Detection
∗ Digital Timer Function : 'Delay Time' and 'Operation Time' : Can be Controlled

Specifications & Ordering information

Spec. \ Model		"WVB-30" Max. Flow 30Lit/min
Range & Accuracy		Room Temp. +5℃ to 100 ℃, ±0.1℃
Temp. Resolution		0.1℃-Display, 0.1℃-Control
Temp. Uniformity & Probe		±0.2℃ , PT100
Heating Power		2 kW
Pump		Magnetic Drive, Max. Flow 30 Lit/min
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end
Display		Digital LCD with Back-Light Function
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection
Lid		Included 5 Holes Stainless-steel Lid for Viscometer Holder
Drain Valve		Mounted
Viewing Window Size(mm)		230×180
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, Vacuum Sealed and Tempered Safety Pair Glasses-Window
Dimension (w×d×h)	Effective Space (mm)	330×300×h260 mm
	Internal (mm)	350×300×h300 mm
	External (mm)	585×375×h420 mm
Packing Size (mm) & Gross Weight (kg)		640×450×h500 mm, 24 kg
Electric Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz
Cat. No.	230V	DH.WVB01030
	120V	DH.WVB02030
Price, Each. ₩		

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 16,000 별도!

Spare Stainless-steel Flat Lid for Viscometer Holder

		Ea. Price, ₩
DH.WVB11030	Flat Lid, for **30 Lit**, w380×d330, 5×Φ50mm Holes, **"VBF030"**	

Optional Viscometer Holder

		Ea. Price, ₩
DH.WVB02010	(1) Viscometer Holder, **"WVB02010" for SI Analytics® Ostwald, Ubbelohde**	
DH.WVB02011	Viscometer Holder, **"WVB02011" for SI Analytics® Cannon-Fenske, Witeg® Ubbelohde, Cannon-Fenske**	
DH.WVB02012	Viscometer Holder, **"WVB02012" for Thread-type Ubbelohde**	

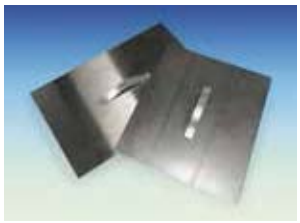
Viscosity Bath Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WVB31030	Validation Service(IQ, OQ), with "WVB-30", **"VBV030"**	

DAIHAN® Digital Precise Circulation Water Bath "WCB", 6 · 11 · 22 Lit, with Certi. & Traceability

With Stainless-steel Flat Lid, Powerful Circulation Pump, up to 100℃, ±0.1℃, 5 Lit/min, **정밀 항온 순환 수조**

Digital Precise Circulation Water Bath Max. 22Lit, "WCB-22"



Flat Lid, Stainless-steel (Included)

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

∗ Ideal for Biotechnology, Clinical, Environmental, Medical, Petroleum, Food Industry, Pharmaceutical and Industrial Applications. ∗ Alarm function : Error Status and Timer-end
∗ Warning and Automatic Stop Function in case of Liquid Shortage.
∗ Powerful Circulation Pump Assures Temp. Uniformity : Internal and External Circulation.
∗ Connection with Evaporators and Viscometers is applicable.

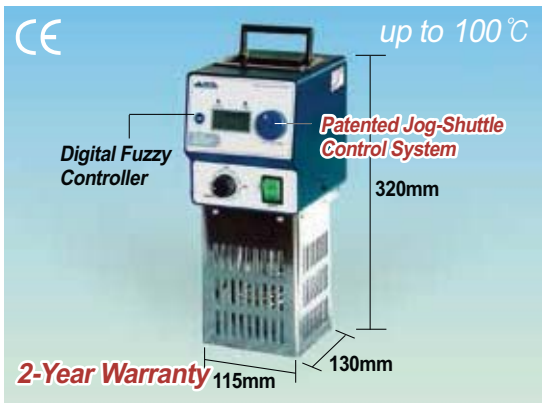
Specifications & Ordering information

Spec. \ Model		"WCB-6" Max. Capa. 6Lit	"WCB-11" Max. Capa. 11Lit	"WCB-22" Max. Capa. 22Lit
Capacity		6 Lit	11 Lit	22 Lit
Temp. Range & Accuracy		Room Temp.+5℃~100℃, ±0.1℃		
Temp. Resolution		0.1℃-Display, 0.1℃-Control		
Temp. Uniformity & Probe		±0.2℃, PT100		
Heating Power		800 W	1 kW	2 kW
Pump		5 Lit / min (Internal / External)		
Circulation Nozzle		id.7×od.11 mm (id.9 / od.12mm silicon tube connected for inner circulation)		
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Controller & Display		Digital Fuzzy Controller with Back Light Digital LCD		
Safety Circuit		Over-Temp./-Current protection, Sensor Error & Low Level Detection		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External		
Drain Valve		None		Mounted(Φ9.5~11mm)
Dimension (w×d×h)	Effective Space	120×155×h150 mm	170×240×h150 mm	372×295×h150 mm
	Internal	300×155×h150 mm	302×240×h150 mm	500×295×h150 mm
	External	330×185×h385 mm	335×275×h385 mm	540×335×h410 mm
Packing Size (mm) and Gross Weight (kg)		350×210×h410mm, 11 kg	360×300×h420mm, 13 kg	580×380×h470mm, 18 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WCB00106	DH.WCB00111	DH.WCB00122
	120V	DH.WCB00206	DH.WCB00211	DH.WCB00222
Price, Each. ₩				

∗ Other Specifications are available upon Customer's Request. ※ **운임 약 ₩ 9,000 별도!**

DAIHAN® Digital Precise Circulation Immersion Pump Head "WCB-H", 11 & 22 Lit, up to 100℃

With Digital Fuzzy Control System, Certi. & Traceability, Power Circulation Pump, 5 Lit/min, **정밀 항온 순환기**



11 & 22Lit, Immersion Circulator Head "WCB-H"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

∗ Ideal for Biotechnology, Clinical, Environmental, Medical, Petroleum, Food Industry, Pharmaceutical and Industrial Applications. ∗ Alarm function : Error Status and Timer-end
∗ Powerful Circulation Pump Assures Temp. Uniformity : Internal and External Circulation.

Specifications & Ordering information

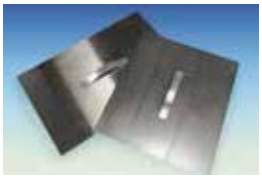
Spec. \ Model		"WCB-11H" Max. Capa. 11Lit	"WCB-22H" Max. Capa. 22Lit
Temp. Range & Sensor		Room Temp.+5℃~100℃, PT100	
Heating Power & Pump		1 kW, 5 Lit/min	2 kW, 5 Lit/min
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end	
Controller & Display		Digital Fuzzy Controller with Back Light Digital LCD	
Safety Circuit		Over-Temp./-Current protector, Sensor Error & Low Level Detection	
Dimension		130×165×h320 mm	
Packing Size (mm) and Gross Weight (kg)		400×280×h200 mm, 8 kg	400×280×h200 mm, 10 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WCB10011	DH.WCB10022
	120V	DH.WCB20011	DH.WCB20022
Price, Each. ₩			

Articles	Cat. No	Description

DAIHAN® Precise High-temp Bath Circulator "MaXircu™ CH", to 250℃, ±0.1℃, 8 · 12 · 22 · 30 Lit
With Stainless-steel Flat Lid, Digital Fuzzy Control System, Certi. & Traceability, Flow 16 Lit/min, Lift 2.8m
Ideal for Heating Line of Facility, External Circulating Connect - od.12.5 & id.10.5mm, **정밀 고온 배스겸용 고온 써큘레이터**

High Temp. Bath Circulator
Max. 8Lit, "CH-8" & Max. 12Lit, "CH-12"

External Circulating Nozzle



Flat Lid, Included

Ex. Multi-use High Temp. Bath Circulator
with Modular Reactor System

- ***Made in Korea.*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance.***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Advanced Heating System Ensures Temperature Performance.***
- ***Patented Jog-Dial Control System and Capacitive Touch Button.***

∗ Digital Fuzzy Control System Implementing Superior Temperature Accuracy.
∗ Innovated Powerful Circulation Pump ensures Temp. Uniformity
: Internal and External Circulation (Max Flow Rate : 16 Lit/min).
∗ Controlled 5 Steps Circulation speed(Flow Rate).
∗ 304 Stainless-steel Bath and Lid for Superior Durability and High Thermal Efficiency.
∗ Compensation Function to Control Difference between Real Temp. and Indicated Temp.
∗ Digital Timer Function : 'Delay Time' and 'Operation Time' can be Controlled.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled).

Specifications & Ordering information

Spec. \ Model		MaXircu™ CH-8 Max. Capa. 8 Lit	MaXircu™ CH-12 Max. Capa. 12 Lit	MaXircu™ CH-22 Max. Capa. 22 Lit	MaXircu™ CH-30 Max. Capa. 30 Lit
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Pump		Max Flow Rate : 16 Lit/min, (Controlled 5 Steps Flow Rate Speed), Max Pressure : 5 psi, Max Lift : 2.8m			
Temp. Range & Accuracy		Room Temp+5℃~ 250℃, ±0.1℃			
Temp. Resolution		0.1℃-Display, 0.5℃-Control			
Temp. Uniformity & Probe		±0.2℃, PT100			
Heating Power		1.0 kW	1.5 kW	2.2 kW	2.5 kW
Heat-up Time		50 min. to 100℃			
External Circulation Nozzle		id.10.5 / od.12.5 mm			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog - Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error & Low Level Detection			
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 50mm Thickness Ceramic Fiber-Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid,			
Dimension (w×d×h)	Effective Space	180×130×h155	250×130×h155	340×250×h155	340×250×h200
	Mounted	180×320×h155	250×320×h155	340×440×h155	340×440×h200
	External	303×443×h569	373×443×h569	463×563×h569	463×563×h614
Packing Size (mm) & Gross Weight(kg)		400×470×h630 19 kg	400×470×h630 21 kg	490×600×h680 23 kg	490×600×h680 37 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCH00408	DH.WCH00412	DH.WCH00422	DH.WCH00430
	120V	DH.WCH00508	DH.WCH00512	DH.WCH00522	DH.WCH00530
Price, Each. ₩					

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

※ See page 37 for the Cooling/Heating Transfer Fluid & Circulation Hose ;
- ▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid
- ▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid
- ▶ Insulated External Circulating Tubing

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

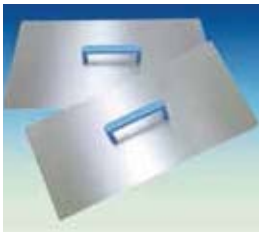
DAIHAN® −25+150℃ Digital Precise Refrigerated/Heating Bath Circulator "MaXircu™ CR", ±0.2℃

With Flat Lid, Digital Fuzzy Control, CFC-free Refrigeration, Certi. & Traceability, 8 · 12 · 22 · 30 Lit, Flow 25Lit/min, Lift 4m

Ideal for Cooling/Heating Line of Facility, External/Internal Circulating Connect - od.12 & id.10mm, **정밀 냉동/가열 배스 겸용 써큘레이터**

−25℃ ~ +150℃ Refrigerated / Heating Bath Circulator
Max. 8Lit, "CR-8" & Max. 12Lit, "CR-12"

External Circulation Nozzle



Flat Lid, Stainless-steel (Included)

※ See page 37 for the Cooling/Heating Transfer Fluid & Circulation Hose ;

- ▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid
- ▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid
- ▶ Insulated External Circulating Tubing

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ■ ***Advanced Refrigerating System Ensures Temperature Performance.***
- ■ ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy.***
- ■ ***Patented Jog-Dial Control System and Capacitive Touch Button, Digital LCD with Back-Light Function.***

∗ Innovated Powerful Circulation Pump ensures Temp. Uniformity : Internal and External Circulation (Max Flow Rate : 25 Lit/min).
∗ Controlled 5 Steps Circulation speed(Flow Rate).
∗ Innovated Refrigeration System, CFC-free (R-404A).
∗ External & Internal Circulation : Possible.
∗ For Inner Circulating : to Connect directly the In-/outlet Nozzles.
∗ RS232C Interface for Remote Monitoring and Controlling with PC.
∗ More Faster Cool-down Time.
∗ Urethane Foam Insulation.
∗ All models Built in Caster.
∗ Proper Liquid Level Line in Bath.
∗ User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0℃).
∗ Warning and Auto-Stop Function in case of Liquid Shortage.
∗ Auto-controlled Refrigeration System for Compressor Protection and Power Saving.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled).

Specifications & Ordering information

Spec. \ Model		MaXircu™ CR-8 Max. Capa. 8 Lit	MaXircu™ CR-12 Max. Capa. 12 Lit	MaXircu™ CR-22 Max. Capa. 22 Lit	MaXircu™ CR-30 Max. Capa. 30 Lit
Temp. Range & Accuracy		−25℃~ +150℃, ±0.1℃			
Temp. Resolution		0.1℃-Display, 0.1℃-Control			
Temp. Uniformity & Probe		±0.2℃ at −10℃, PT100			
Pump		Max Flow Rate : 25Lit/min(Controlled 5 Steps Flow Rate Speed), Max Pressure : 7.5 psi, Max Lift : 4m			
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Heating Power		1 kW	1.5 kW	2 kW	2.2 kW
Refrigerator		1/3HP	1/3HP	1/2HP	3/4HP
Cooling Capacity	at +20℃	300 W	380 W	680 W	850 W
	at 0℃	200 W	250 W	500 W	620 W
	at −20℃	110 W	130 W	300 W	400 W
Refrigerant		CFC -Free(R-404A) Refrigeration System			
Total Power Consumption		1.6 kW	2 kW	2.7 kW	3 kW
Compressor Control		Intelligent Control of Refrigerator for preventing Compressor Overload			
Pump		Max Flow Rate : 25Lit/min, Max Pressure : 7.5 psi, Max Lift : 4m			
External Circulation Nozzle		id.10.5 / od.12.5mm(For Inner Circulat. : to Connect directly the in-/outlet Nozzles)			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog-Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker			
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 40mm Thickness Urethane Foaming - Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid,			
Dimension (w×d×h)	Effective Space (mm)	175×153×150	230×181×150	290×220×200	330×290×200
	Internal (mm)	175×320×150	230×350×150	290×390×200	330×460×200
	External (mm)	330×474×752	400×523×807	483×563×850	494×633×906
Packing Size (mm) & Gross Weight (kg)		420×560×925	530×630×985	615×670×1025	630×740×1075
		45 kg	54 kg	63 kg	70 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCR00408	DH.WCR00412	DH.WCR00422	DH.WCR00430
	120V	DH.WCR00508	DH.WCR00512	DH.WCR00522	DH.WCR00530
Price, Each. ₩					

∗ Other Specifications are available upon Customer's Request.

※ **운임 약 ₩ 16,000 별도!**

Refrigerated Circulator with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WCR30308	Validation Service(IQ, OQ), with "MaXircu CR-8", **"CRBV208"**	
DH.WCR30312	, with "MaXircu CR-12", **"CRBV212"**	
DH.WCR30322	, with "MaXircu CR-22", **"CRBV222"**	
DH.WCR30330	, with "MaXircu CR-30", **"CRBV230"**	

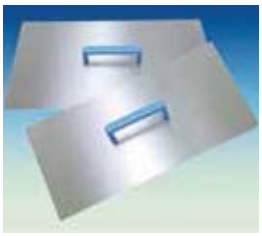
DAIHAN® −35+150℃ Digital Precise Refrigerated/Heating Bath Circulator "MaXircu™ CL", ±0.2℃

With Flat Lid, Digital Fuzzy Control, CFC-free, Certi. & Traceability, Capa. 8 · 12 · 22 · 30 Lit, Flow 25Lit/min, Lift 4m

Ideal for Cooling/Heating Line of Facility, External/Internal Circulating Connect - od.12 & id.10mm, **정밀 냉동/가열 배스 겸용 써큘레이터**

−35℃ ~ +150℃ Refrigerated / Heating Bath Circulator
Max. 8Lit, "CL-8" & Max. 12Lit, "CL-12"

External Circulation Nozzle



Flat Lid, Stainless-steel (Included)

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Advanced Refrigeration System Ensures Temperature Performance***
- ■ ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ■ ***Patented Jog-Dial Control System and Capacitive Touch Button, Digital LCD with Back-Light Function.***

* Innovated Powerful Circulation Pump ensures Temp. Uniformity : Internal and External Circulation (Max Flow Rate : 25 Lit/min).
* Controlled 5 Steps Circulation speed(Flow Rate).
* Innovated Refrigeration System, CFC-free (R-404A).
* External & Internal Circulation : Possible
* For Inner Circulating : to Connect directly the In-/outlet Nozzle.
* RS232C Interface for Remote Monitoring and Controlling with PC
* More Faster Cool-down Time
* Urethane Foam Insulation
* All models Built in Caster
* Proper Liquid Level Line in Bath
* Connection with Evaporator or Viscometer is applicable
* User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0℃).
* Warning and Auto-Stop Function in case of Liquid Shortage.
* Auto-controlled Refrigeration System for Compressor Protection and Power Saving.
* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

Spec. \ Model		MaXircu™ CL-8 Max. Capa. 8 Lit	MaXircu™ CL-12 Max. Capa. 12 Lit	MaXircu™ CL-22 Max. Capa. 22 Lit	MaXircu™ CL-30 Max. Capa. 30 Lit
Temp. Range & Accuracy		−35℃~ +150℃, ±0.1℃			
Temp. Resolution		0.1℃-Display, 0.1℃-Control			
Temp. Uniformity & Probe		±0.2℃ at −20℃, PT100			
Pump		Max Flow Rate : 25Lit/min(Controlled 5 Steps Flow Rate Speed), Max Pressure : 7.5 psi, Max Lift : 4m			
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Heating Power		1 kW	1.5 kW	2 kW	2.2 kW
Refrigerator		1/2HP	1/2HP	7/8HP	1HP
Cooling Capacity	at +20℃	500 W	530 W	860 W	1030 W
	at 0℃	340 W	370 W	620 W	760 W
	at −20℃	200 W	210 W	400 W	500 W
Refrigerant		CFC -Free(R-404A) Refrigeration System			
Total Power Consumption		1.7 kW	2.2 kW	3 kW	3.3 kW
Compressor Control		Intelligent Control of Refrigerator for preventing Compressor Overload			
External Circulation Nozzle		id.10.5 / od.12.5mm(For Inner Circulat. : to Connect directly the in-/outlet Nozzles)			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog-Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker			
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 40 mm Thickness Urethane Foaming - Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid			
Dimension (w×d×h)	Effective Space (mm)	175×153×150	230×181×150	290×220×200	330×290×200
	Internal (mm)	175×320×150	230×350×150	290×390×200	330×460×200
	External (mm)	400×523×807	400×523×807	483×563×850	494×633×906
Packing Size (mm) & Gross Weight (kg)		530×630×985 / 50 kg	530×630×985 / 55 kg	615×670×1025 / 65 kg	630×740×1075 / 78 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCL00408	DH.WCL00412	DH.WCL00422	DH.WCL00430
	120V	DH.WCL00508	DH.WCL00512	DH.WCL00522	DH.WCL00530
Price, Each. ₩					

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 16,000 별도!

※ See page 37 for the Cooling/Heating Transfer Fluid & Circulation Hose ;

- ▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid
- ▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid
- ▶ Insulated External Circulating Tubing

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

Refrigerated Circulator with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WCL30308	Validation Service(IQ, OQ), with "MaXircu CL-8", **"CLBV208"**	
DH.WCL30312	, with "MaXircu CL-12", **"CLBV212"**	
DH.WCL30322	, with "MaXircu CL-22", **"CLBV222"**	
DH.WCL30330	, with "MaXircu CL-30", **"CLBV230"**	

Articles	Cat. No	Description

Insulated Silicone & Teflon PFA Circulation Hose, Id Φ10 ~ 19mm, L1/1.5m

■ ***Supplied by SciLab Korea*** ∗ Φ37mm Black NBR Foam Insulated Silicone or PFA-Hose

∗ Silicone Vacu-Hose : id 10×od 13mm, id 15×od 20mm, id 18×od 24mm, 220℃ ∗ SL.Tub4031 & SL.Tub4032 : PFA Hose

∗ PFA Hose : id 10×od 12mm / PTFE Hose : id 15×od 16mm, id 19×od 21mm, -100 + 260℃

(1) Insulated Silicone Hose, 220℃

		dh Pk. Price,₩
SL.Tub4021	Sili-hose, id 10mm, L1m	1m
SL.Tub4022	, L1.5m	1.5m
SL.Tub4023	, id 15mm, L1m	1m
SL.Tub4024	, L1.5m	1.5m
SL.Tub4025	, id 18mm, L1m	1m
SL.Tub4026	, L1.5m	1.5m

(2) Insulated PFA Hose, 260℃

		dh Pk. Price,₩
SL.Tub4031	PFA-hose, id 10mm, L1m	1m
SL.Tub4032	, L1.5m	1.5m
SL.Tub4033	PTFE-hose, id 15mm, L1m	1m
SL.Tub4034	, L1.5m	1.5m
SL.Tub4035	, id 19mm, L1m	1m
SL.Tub4036	, L1.5m	1.5m

(3) Best Insulatedly & Flexible Stainless-steel Circulation Hose, Id Φ17mm, L1m, 360℃

		Ea. Price,₩
SL.Tub7021	Flexible Stainless-steel Circulation Hose, id 17×od 60mm, L1m	

Therminol D12® −85+230℃ Best COOL-/HEAT-ing Transfer Fluid, Synthetic Hydrocarbon Mixture for Low/High-Temp Baths, Clearly Harmless Liquid, Low Odor FDA Grade, 4/18/200Lit, 냉매/열매 겸용 합성 탄화수소혼합물(액체)

(1) 4Lit

(2) 18Lit

■ ***Supplied by "Eastman" USA*** ■ ***Clear, Water white Liquid / Non-Toxic / Low-Smell, FDA-Grade.***

■ ***The Best Circulation Properties / Thermal Stability.***

■ ***The Lowest Viscosity, cP ► (1) -50℃ : 12cP, (2) 100℃ : 0.46cP, (3) 200℃ : 0.19cP, (4) 230℃ : 0.16cP***

∗ Specific Gravity : 0.759 at 25℃ ∗ Autoignition Temp : 247℃ ∗ Flash point : 62℃

∗ Freezing Point : -94℃ ∗ Boiling Point(90%) : 204℃ ∗ Do not use for Sillicone Tube

∗ Package : (1) 4Lit and (2) 18Lit PE Square Bottle / Subdivision, Original-200Lit Steel Drum / 155kg

		4ℓ.dh pk ₩
SL.CirD12.1	(1) "Therminol D12" Cool/Heat Transfer Fluid, -85 +230℃, 4 Lit	4Lit
		18ℓ.dh pk ₩
SL.CirD12.2	(2) "Therminol D12" Cool/Heat Transfer Fluid, -85 +230℃, 18 Lit	18Lit
	※ 운임 약 ₩ 25,000 별도!	**Drum Price,₩**
SL.CirD12	"Therminol D12" Cool/Heat Transfer Fluid, -85 +230℃, 200 Lit/Drum	200Lit

Heating Transfer Fluid, 20Lit

SYN THERM 22L® −5+320℃ Heating Transfer Fluid, Synthetic Alkylbenzene Derivative For Low- & High-Temp Circulation, 알킬벤젠계 합성열매 NEW

■ ***Made in Korea***

∗ Hazards Identification of MSDS(Material Safety Data Sheet) :

- H315 Causes Skin Irritation
- H319 Causes Serious Eye Irritation
- H335 May Cause Respiratory Irritation
- H336 May Cause Drowsiness or Dizziness

∗ Kinematic Viscosity & Density :

(1) at 0℃ : 22.7cSt, 0.885kg/ℓ (2) at 40℃ : 21.80cSt, 0.859kg/ℓ

(3) at 80℃ : 6.09cSt, 0.834kg/ℓ (4) at 140℃ : 6.09cSt, 0.795kg/ℓ

(5) at 200℃ : 1.10cSt, 0.756kg/ℓ (6) at 260℃ : 0.74cSt, 0.718kg/ℓ

		Pk. Price, ₩
SL.SYN22L	SYN THERM 22L® Heating Transfer Fluid -5 +320℃, 20Lit	20Lit

Articles	Cat. No	Description

DAIHAN® Sample Mixer "BLD-1620", Lab Stomacher, Digital Controller, Low Noise, for 330 ~ 1,620㎖ Bags NEW

With ABS Body, Adjustable Pedal Distance, 10 Level Speed Adjusting Function, 무균 시료 분쇄기, 미생물 실험 전처리

Sample Mixer "BLD-1620"
With Powerful Stomaching Mechanism
for 330~1620ml Bags

- ***Made in Korea***
- ***PL(Product Liability) Insurance***
- ***Food Microbiology, Veterinary, Clinical, Pharmaceutical, Molecular Extraction, Toxin Research, Environmental Analyses***
- ***10 Level Motor Speed Adjusting Function***
- ***Ergonomic Design with ABS body.***
- ***Strong Door Lever : Easy to Open & Close***
- ***Power Stomaching Mechanism.***

* For Blending and Filtering Solid Samples for Microbiological Analysis.
* Pedal Distance Adjust Function Ensure Quick and Precise Sterile Blending of Samples
* Multifunction Digital Control Display for Monitoring Operating Condition, Speed, Time
* ABS Body
* Cost Effective.

Specifications & Ordering Information

Spec. \ Model	Sample Mixer "BLD-1620"
Capacity	330㎖ ~ 1620㎖
Speed	1 ~ 10 Level (1~8 stroke/sec)
Pedal Distance Adjust	0 ~ 50mm
Display	Digital Control Display
Controller	Digital Controller
Timer	Continuous & 0 ~ 99 min 59 sec
Motor	BG65×50 (100W) + SG80K (1/10), Dunker
Door	Transparent Window
Dimensions	200×366×h232mm
Weight	15kg
Power Consumption	DC 24V 6.5A
Power Supply*	220V, 60Hz (Fuse 2A 250V)
Cat. No.	**DH.Ble001**
Price, Each. ₩	

※ **NOTE : Design and Specification can be changed when it's released**

(1) Plain type
190×300mm

(2) Filter type
190×300mm

(3) Filter & Wire type
190×300mm

(4) Wire type
190×300mm

(5) Wire type
150×230mm

(6) Filter & Wire type
150×230mm

Sterile Sample Bags for Sample Mixer

Model		1930	1930F	1930FW	1930W	1523W	1523FW
Volume		Up to 1,620㎖				Up to 710㎖	
Sterilization		Gamma Sterilization					
Sampling		Multi Use					
Filter	**Type**	None	Lateral	Lateral	None	None	Lateral
	Porosity	5~150um					
	Material	None	Non-woven	Non-woven	None	None	Non-woven
Bag	**Size**	190×300mm				150×230mm	
	Material	PE	PE+Nylon	PE+Nylon	PE	PE	PE+Nylon

		Pk. Price, ₩	Cs. Price, ₩
3M.06.1930	(1) Sample Bag, 190×300mm, 1620㎖, Plain type	50ea	10pk
3M.06.1930F	(2) , Filter type	50ea	10pk
3M.06.1930FW	(3) , Filter & Wire type		250ea
3M.06.1930W	(4) , Wire type		500ea
3M.06.1523W	(5) , 150×230mm, 710㎖, Wire type		500ea
3M.06.1523FW	(6) , Filter & Wire type		250ea

How to use Sample Bag

1. Upon the requirement, write down the sample information on the bag.

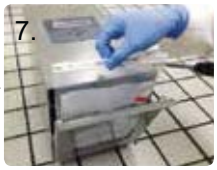
2.Tear the upper part of bag along the perforated line.

3. Open the bag by grabbing tabs.

4. Insert the sample into the bag.

5. Grab the end of wire and roll the bag 2 or 3 times.

6. Fold the end of wire to fix the closing of bag.



7. Insert the sample bag into the blender.

DAIHAN Scientific

Centrifuge

Centrifuge, Mini-micro ····· P. 40
, Pro-micro ····· P. 41~42
, Table-top Classic ····· P. 43
, Table-top Microprocessor ····· P. 44

"MaXpin C-6mt" "CF-5"

Mini-micro Centrifuge

6×0.2 / 0.5 / 1.5 / 2.0 ml Tubes

"CF-10" "MaXpin C-12mt"

Pro-micro Centrifuge

12×0.2 / 0.5 / 1.5 / 2.0ml

Table-top Classic Centrifuge

6 / 12 / 24×(1.5~50)ml

"Cef-50.6"

Table-top Microprocessor Centrifuge

6 / 12 / 24×(1.5~50)ml

"Cef-D50.6"

Articles	Cat. No	Description

DAIHAN® Hi-Quality Mini-microcentrifuge Set "MaXpin C-6mt", Max. 5,500 rpm, Rapidly Stop Spin-motion for safety
With Circular Fixed-Angle Rotor for 6×0.2/0.5/1.5/2.0㎖ Tubes and Strip Rotor for 2×0.2㎖ PCR 8-tubes Strips/16×0.2㎖ PCR Tubes
미니-마이크로 원심분리기 세트, 신속한 회전동작 정지, 앵글-/스트립-로터 포함, 0.2/0.5㎖ 튜브 어댑터 포함

"MaXpin C-6mt" for 6 Tubes of 0.2 ~ 2.0ml with Circular Fixed Angle Rotor

■ ***Made in Korea*** ■ ***PL(Product Liability) Insurance*** ■ ***Rapidly Stop Spin-motion for user safety***
* with Certificate & Traceability * Complete Set with Circular Fixed-Angle Rotor and Fixed Strip Rotor
* Supplied with two Rotors :
  - **Circular Fixed-Angle Rotor** for 6×0.5-/1.5-/2.0-ml Tubes (6×0.2-/0.5-ml tube Adapters included)
  - **Strip Rotor** for 2×0.2ml PCR 8-tubes Strips or 16ea of individual 0.2ml PCR Tubes
* Smooth Opening of the Lid by Simply Pressing * Rubbmized Base
* Lid-Activated On/Off Safety Switch : Close the Clear Lid to Start and Open to Stop

Specifications & Ordering information

Spec. \ Model		"MaXpin C-6mt", Rapidly Stop Spin-motion for safety
RPM & Max. RCF		Max. 5,500 rpm, 1,775×g
Max. Capacity		6×0.5-/1.5-/2.0-ml tubes, 2×0.2ml PCR 8-tube Strip or 16×0.2ml PCR 8 Tubes
Rotor (included)	Angle Rotor	6 Holes Circular Fixed-Angle Rotor for 0.5-/1.5-/2.0-ml Tubes
	Strip Rotor	16 Holes Strip Rotor for 0.2ml PCR 8-tube Strip or individual Tubes
Adapter		Included 6×0.2-/ 0.5-ml Tube Adapter
Material		Lid-PC, Body-ABS, Rotor-ABS
Dimension (w×d×h)		Unit : 144×192 ×h108 mm, 1.1kg, Packing : 175×255×h215 mm, 1.6 kg
Power Consumption		8 W
Electric Reqts.		1 Phase, AC 100 ~ 240V, 50/60Hz
Cat. No.	230V	**DH.WCF00006**
	120V	**DH.WCF00026**
Price, Each. ₩		

* Other Specifications are available upon Customer's Request.

DAIHAN® High performance Mini-microcentrifuge Set "CF-5", Class-I Medical Device(NIDS), Max. 5,500 rpm
With Circular Fixed-Angle Rotor for 6×0.2/0.5/1.5/2.0㎖ Tubes and Strip Rotor for 2×0.2㎖ PCR 8-tubes Strips/16×0.2㎖ PCR Tubes
미니-마이크로 원심분리기 세트, 앵글-/스트립-로터 포함, 0.2/0.5㎖ 튜브 어댑터 포함

"CF-5" for 6 Tubes of 0.2 ~ 2.0ml with Circular Fixed Angle Rotor

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL(Product Liability) Insurance***
* with Certificate & Traceability * Complete Set with Circular Fixed-Angle Rotor and Fixed Strip Rotor
* Supplied with two Rotors :
  - **Circular Fixed-Angle Rotor** for 6×0.5-/1.5-/2.0-ml Tubes (6×0.2-/0.5-ml tube Adapters included)
  - **Strip Rotor** for 2×0.2ml PCR 8-tubes Strips or 16ea of individual 0.2ml PCR Tubes
* Smooth Opening of the Lid by Simply Pressing * Operation Display LED Lamp
* Lid-Activated On/Off Safety Switch : Close the Clear Lid to Start and Open to Stop

Specifications & Ordering information

Spec. \ Model		"CF-5"
RPM & Max. RCF		Max. 5,500 rpm, 1,775×g
Max. Capacity		6×0.5-/1.5-/2.0-ml tubes, 2×0.2ml PCR 8-tube Strip or 16×0.2ml PCR 8 Tubes
Rotor (included)	Angle Rotor	6 Holes Circular Fixed-Angle Rotor for 0.5-/1.5-/2.0-ml Tubes
	Strip Rotor	16 Holes Strip Rotor for 0.2ml PCR 8-tube Strip or individual Tubes
Adapter		Included 6×0.2-/ 0.5-ml Tube Adapter
Material		Lid-PC, Body-ABS, Rotor-ABS
Dimension (w×d×h)		Unit : 178×150 ×h109 mm, Packing : 200×180×h175 mm, 2 kg
Power Consumption		8 W
Electric Reqts.		1 Phase, AC 100 ~ 240V, 50/60Hz
Cat. No.	230V	**DH.WCF00005**
	120V	**DH.WCF00025**
Price, Each. ₩		

* Other Specifications are available upon Customer's Request.

Fixed Rotor & Adapter for Spare, 0.2-/0.5-ml Tube Adapter-set, 스페어 로터/튜브 어댑터

(1)

(2)

(3)

		Ea. Price, ₩
DH.WCF00105	(1) Circular Fixed Angle Rotor, for **"MaXpin C-6mt", "CF-5"** for 6×0.2-/0.5-/1.5-/2.0-ml Tubes	
DH.WCF00205	(2) Fixed Strip Rotor, for **"MaXpin C-6mt", "CF-5"** for 2×0.2ml PCR8-tube Strips or 16×0.2ml PCR Tubes	
DH.WCF00201	(3) 0.2ml Tube Adapter-sets, 6ea Adapter/1set, for Circular Fixed Angle Rotor, for **"MaXpin C-6mt", "CF-5"**	
DH.WCF00301	(3) 0.5ml Tube Adapter-sets, 6ea Adapter/1set, for Circular Fixed Angle Rotor, for **"MaXpin C-6mt", "CF-5"**	

DAIHAN® High-Performance Pro-microcentrifuge Set "CF-10", Class-I Medical Device(NIDS), Max. 13,500rpm

With MC Nylon Fixed Angle Rotor for 12×0.2-/0.5-/1.5-/2.0-mℓ Tubes, Compact, Quiet, Safety Electronic Lid Lock System

프로-마이크로 원심분리기, 전자식 안전 도어 잠금 시스템, Fixed Angle Rotor & 0.2/0.5mℓ **튜브 어댑터 포함**

"CF-10" for 12 Tubes of 0.2 ~ 2.0ml with MC Nylon Fixed Angle Rotor

(1) MC Nylon Fixed Angle Rotor
for 12×0.2-/0.5-/1.5-/2.0-ml

(2) Tube Adapter
12×0.2/0.5ml Tube Adapter

- ***Made in Korea*** ■ ***CE Certified***
- ***Unbelievably Quiet Operation - Brushless DC motor***
- ***High Performance - Digital Feedback Speed Control, Max. 13,500rpm, 12,225×g***
- ***Useful Exclusive Spin Down Function***
- ***Included MC Nylon Fixed Angle Rotor for 1.5-/2.0-ml×12 Tubes and 12×0.2-/0.5-ml PCR Tube Adapters***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***
- ***PL(Product Liability) Insurance***

∗ Plasmid, DNA and RNA work, protein work, and miniprep kit, Cell Culture, cell harvesting, subcellular separations, and many other applications.
∗ Unnecessary Rotor Lid for Running and Reducing Noise (≤57dB at Max. RPM).
∗ Realize Extremely Compact Design with Exceptionally Small Footprint.
∗ Acceleration and Braking Times are Lower than 15 sec (at Max. Speed).
∗ Storage Function for the Set Values : RPM & Time.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be disabled).
∗ Safety System for Motor Error.
∗ **Safety Electronic Lid Lock System :** Opening Lid is not applicable during running.
∗ Simple Operation for Repetitive use of 'Spin Down' Function.

Specifications & Ordering information

Spec. \ Model		"CF-10"
RCF		1,000~13,500 RPM , 12,225×g
Max. Capacity		0.2-/0.5-/1.5-/2.0-ml×12 Tubes
Rotor		MC Nylon Fixed Angle Rotor for 0.2-/0.5-/1.5-/2.0-ml×12 Tubes
Drive System		Brushless DC motor, Direct drive
Noise Level		≤57 dB
Acceleration & Braking Time		≤15 sec (at Max. speed)
Cooling Device		Air Cooling System
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end
Display		Digital LCD with Back-Light Function
Controller		Digital Feedback Control with Jog-Shuttle Switch (Turn+Push)
Safety Circuit		Motor Error Detector, Electronic Safety Lid Lock System
Material		Lid-PC, Body-ABS, Rotor-PE
Dimension & Weight		170×226×h183 mm, 2.3 kg
Packing Size & Gross Weight		290×240×h220 mm, 5 kg
Power Consumption		90W
Electric Reqts.		1 Phase, AC 120V, 50/60Hz or AC 230V, 50 / 60Hz
Cat. No.	230V	DH.WCF00010
	120V	DH.WCF00011
Price, Ea. ₩		

∗ Other Specifications are available upon Customer's Request.

Spare Rotor & Adapter Set

		Ea. Price, ₩
DH.WCF00100	MC Nylon Fixed Angle Rotor, **"CFAR1512",** for **"CF-10",** 12×0.2-/0.5-/1.5-/2.0-ml Tubes	
DH.WCF00200	0.2ml Tube Adapter-sets, 12ea Adapter/1set, for Fixed Angle Rotor, **"CFTA1"**	
DH.WCF00300	0.5ml Tube Adapter-sets, 12ea Adapter/1set, for Fixed Angle Rotor, **"CFTA2"**	

Articles	Cat. No	Description

DAIHAN® Premium Pro-microcentrifuge Set "MaXpin C-12mt", Max. 13,500rpm, 12,225×g

With Aluminum Die Casting Lid & Electronic Lid Lock System for safety, Autoclavable PP Fixed Angle Rotor for 12×0.2-/0.5-/1.5-/2.0-㎖ Tubes

프로-마이크로 원심분리기, 전자식 안전 도어 잠금 시스템, 앵글 로터 포함, 0.2/0.5㎖ 튜브 어댑터 포함

"MaXpin C-12mt" for 12 Tubes of 0.2 ~ 2.0ml with PP Fixed Angle Rotor

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***Unbelievably Quiet Operation due to Optimized Air Flow Design (Noise Level ≤ 57db)***
- ***Brushless DC Motor Provides Maintenance Free Operation.***
- ***Perfectly Constructed Frame Structure. Strong Layered Aluminum Die Casting Lid with Auto Lock Mechanism Assuring a Safe and Secure Lock.***
- ***High Performance - Digital Feedback Speed Control, Max. 13,500rpm, 12,225×g***
- ***Useful Exclusive Spin Down Function***
- ***Supplied in Complete Set : PP Fixed Angle Rotor for 1.5-/2.0-ml×12 Tubes and PCR Tube Adapters (12×0.2ml & 12×0.5ml)***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

∗ Easy to Use Compact Design Allows for Fast Centrifugation ∗ Sleek, Space Saving Footprint
∗ Intuitive Controls and Easy to Read Display Simplifies Operation.
∗ Ideal for Fast Isolating and Pelleting of DNA, RNA, Proteins, and Cell Viruses
∗ Max. 13,500 rpm with 12 Position, Autoclavable PP Fixed Angle Micro-Rotor
∗ Large Backlit LCD-screen for Settings and Parameters
∗ The System Displays Errors, Excess Speed, and Open Lid.
∗ Load Imbalance Detection.
∗ Strong Steel Layered Door with Safety, Auto-Lock Function
∗ Automatic Door Release ∗ Easy to Close Lid
∗ Biocontainment Rotor Lid Ensuring Securely Contained Samples
∗ Soft Brake Function to Protect Delicate Samples
∗ PP Inner Lid for Maximize Safety (Optional)

Perfectly Constructed Frame Structure, Strong Layered Lid

Specifications & Ordering information

Spec. \ Model		"MaXpin C-12mt" Aluminum Die Casting Lid & Electronic Lid Lock System
RCF		1,000~13,500 RPM , 12,225×g
Max. Capacity		0.2-/0.5-/1.5-/2.0-ml×12 Tubes
Rotor (included)		PP Fixed Angle Rotor for 0.2-/0.5-/1.5-/2.0-ml×12 Tubes
Adapter (included)		12×0.2ml & 12×0.5ml PCR Tubes
Drive System		Brushless DC motor, Direct drive, Vibration Insulated, Counterclockwise Rotating
Noise Level		≤57 dB
Acceleration & Braking Time		≤12 sec (at Max. speed)
Cooling Device		Air Cooling System
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end
Display		Large Digital LCD with Back-Light Function
Controller		Digital Feedback Control with Jog-Shuttle Switch (Turn+Push)
Safety Circuit		Motor Error Detector, Electronic Safety Lid Lock System
Material		Lid-Aluminum Die Casting, Body-ABS, Rotor-PE
Dimension & Weight		187×253×h155 mm, 3.8 kg
Packing Size & Gross Weight		230×290×h245 mm, 4.3 kg
Power Consumption		90W
Electric Reqts.		1 Phase, AC 120V, 50/60Hz or AC 230V, 50/60Hz
Cat. No.	230V	DH.WCF01350
	120V	DH.WCF01351
Price, Each. ₩		

∗ Other Specifications are available upon Customer's Request.

(2) Tube Adapter(Included)
12×0.2/0.5ml Tube Adapter

Spare Rotor & Adapter Set

		Ea. Price, ₩
DH.WCF11350	(1) PP Fixed Angle Rotor, Autoclavable, for **"MaXpin C-12mt"**, 12×0.2-/0.5-/1.5-/2.0-ml Tubes	
DH.WCF00200	(2) 0.2ml Tube Adapter-sets, 12ea Adapter/1set, for Fixed Angle Rotor, **"CFTA1"**	
DH.WCF00300	(2) 0.5ml Tube Adapter-sets, 12ea Adapter/1set, for Fixed Angle Rotor, **"CFTA2"**	

DAIHAN® 1.5~50㎖ Popular Classic Centrifuge "Cef", Class-I Medical Device(NIDS), 3000- & 6000-rpm
With 6- & 8-Holes, or 12- & 24-Holes(in 50㎖ Model) Fixed Angle Rotor, Safety Balance, 1.5~50㎖ 튜브용 경제형 원심분리기

I. "Cef-6" for 6 Tubes of 1.5~15ml, with 6 Holes Fixed Angle Rotor, 3000rpm

II."Cef-8" for 8 Tubes of 1.5~15ml, with 8 Holes Fixed Angle Rotor, 6000rpm

III. "Cef-50.6" for 6 Tubes of 50ml, with 6 Holes Fixed Angle Rotor, 4000rpm

■ ***DAIHAN Designed*** ■ ***Speed is Linear and Stables*** ■ ***Interchangeable Rotor***
■ ***with 6- & 8-Holes or 12- & 24-Holes Fixed Angle Rotor for 1.5ml ~ 50ml Tubes ; On Adapters Adjustable 1.5/2ml, 5~7ml, 10~15ml, and 50ml***

* The Design is up-to-date, Beautiful Outlook and Durable
* Auto-balancing System
* Stepless Controller : Speed and Operating Time
* ABS Outer Shell can Resist Collision.
* with Safety Switch when Centrifuge Lid Opened the Motor can be Stop

Specifications & Ordering information

Spec. \ Model		I. 15ml "Cef-6" 6 Holes - 1.5~15ml	II. 15ml "Cef-8" 8 Holes - 1.5~15ml	III. 50ml "Cef-50.6" 6 Holes - 50ml or 12/24 Holes - 1.5~15ml
Fixed Angle Rotor&Capa.	Included	6Hole ; (1.5~15)ml Tubes	8Hole ; (1.5~15)ml Tubes	(1) 6Hole ; 50ml Tubes
	Option			(2) 12Hole ; (1.5~15)ml Tubes (3) 24Hole ; (1.5~15)ml Tubes
Useful Tube size & Acceptance		6 Tubes ; 10~15ml, 1.5~7ml on Adapters	8 Tubes ; 10~15ml, 1.5~7ml on Adapters	(1) 6 Tubes ; 50ml When option Rotor ; (2) 12 Tubes ; 10~15ml (3) 24 Tubes ; 10~15ml 1.5~7ml on Adapters
Adapter and Size	Included	② 6ea×10~15ml Tubes Size ; id17.5×L95mm	② 8ea×10~15ml Tubes Size ; id17.5×L95mm	① 6ea×50ml Tubes Size ; id30.7×L104mm
	Option	③ 6ea×5~7ml Tubes Size ; id13.5×L69mm ④ 6ea×1.5/2ml Tubes Size ; id11×L42mm	③ 8ea×5~7ml Tubes Size ; id13.5×L69mm ④ 8ea×1.5/2ml Tubes Size ; id11×L42mm	② 12/24ea×10~15ml Tubes Size ; id17.5×L95mm ③ 12/24ea×5~7ml Tubes Size ; id13.5×L69mm ④ 12/24ea×1.5/2ml Tubes Size ; id11×L42mm
Speed Range (rpm)		300~3000rpm at 60Hz (300~2500rpm at 50Hz)	300~6000rpm	600~4000rpm
R.C.F		1,066×g	4,265×g	2,325×g
Display		None	Tachometer for Speed & R.C.F	None
Timer		0~30min Analog Timer		
Motor		Induction Motor	DC Motor	
Safety Manual Brake		None	Yes	None
Dimension & Weight		280×280×h255mm, Net. 3.5kg, Gross. 4kg	280×280×h265mm, Net. 4.5kg, Gross. 5kg	300×300×h315mm, Net. 8.5kg, Gross. 9kg
Electric Reqts		AC 230V, 50/60Hz or AC 120V, 60Hz		
Cat. No.	230V	**DH.Cef0006**	**DH.Cef0008**	**DH.Cef0010**
	120V	**DH.Cef0106**	**DH.Cef0108**	**DH.Cef0110**
Price, Each. ₩				

Spare Rotor and Tube Adapter

		Ea. Price, ₩
DH.CefR5006	(1) 50ml 6Holes Angle Rotor "R5006" with 6ea×50ml Tube Adapter PP "TA50", id⌀30.7×L104mm, for **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefA050	① 50ml Tube Adapter PP "TA50", id⌀30.7×L104mm, Fit to Rotor "R5006", for Centrifuge **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefA015	② 10~15ml Tube Adapter PP "TA15", id⌀17.5×L98mm, for Centrifuge **"Cef-6"** & **"Cef-8"**, and Rotor **"R1512"** & **"R1524"**	

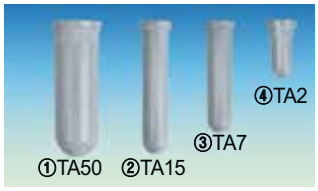
Optional Rotor and Tube Adapter

		Ea. Price, ₩
DH.CefR1512	(2) 10~15ml 12Holes Angle Rotor "R1512", with 12ea×10/15ml Tube Adapter "TA15", id⌀17.5×L98mm, for Centrifuge **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefR1524	(3) 10~15ml 24Holes Angle Rotor "R1524", with 24ea×10/15ml Tube Adapter "TA15", id⌀17.5×L98mm, for Centrifuge **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefA007	③ 5~7ml Tube Adapter PP "TA7", id⌀13.5×L69mm, Fit to "TA15", Tube Adapter, for Centrifuge **"Cef-6"**, **"Cef-8"**, **"Cef-50.6"**, and **"Cef-D50.6"**	
DH.CefA002	④ 1.5/2ml Tube Adapter PP "TA2", id⌀11×L42mm, Fit to "TA15", "TA1503" Tube Adapter, for Centrifuge **"Cef-6"**, **"Cef-8"**, **"Cef-50.6"**, and **"Cef-D50.6"**	

(1) Fixed Angle Rotor ; 50ml 6Holes, "R5006"

(2) Fixed Angle Rotor ; 10~15ml 15Holes, "R1512"

(3) Fixed Angle Rotor ; 10~15ml 24Holes, "R1524"



Optional Tube Adapter

DAIHAN® 1.5~50㎖ Microprocessor Centrifuge "Cef-D50.6", Class-I Medical Device(NIDS), Max. 4000rpm

With 6-Holes or 12- & 24-Holes Fixed Angle Rotor, Digital Model, Safety Interlock, 1.5~50㎖ 튜브용 디지털 원심분리기

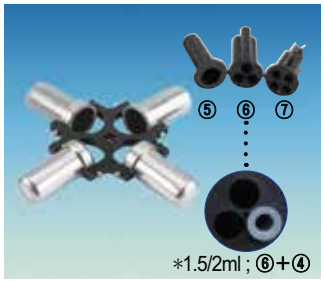
"Cef-D50.6" for 6 Tubes of 50ml, with 6 Holes Fixed Angle Rotor, 4000rpm

- ***DAIHAN Designed***
- ***Durable and Maintenance Free - Brushless DC Motor***
- ***Ideal for Biology, Medicine, Pharmacology, Laboratory, etc. Various Application***
- ***with 6-Holes or 12- & 24-Holes Fixed Angle Rotor for 1.5ml ~ 50ml Tubes ; On Adapters Adjustable 1.5/2ml, 5~7ml, 10~15ml, and 50ml***
- ***Automatic Quick Self-Cooling by Fan***
- ***Interchangeable Rotor***
- ∗ Compact Design with Automatic Door Release.
- ∗ Easy to Use Controls and Display
- ∗ Self-diagnostic Function : Lid Opening, Unbalance, Over-Heat/ Current/ Voltage/ Speed
- ∗ Auto-balancing System for Extend Motor Life and Reduce Noise
- ∗ Program Memory Function : 9Set.
- ∗ Precision Digital Timer, Set to 10Sec. / Max 30 Min
- ∗ Pushing the Function Key for Short Runs
- ∗ Rapid Deceleration due to Automatic Brake System

(1) Fixed Angle Rotor ; 50ml
6Holes, "R5006"

(2) Fixed Angle Rotor ; 10~15ml
12Holes, "R1512"

(3) Fixed Angle Rotor ; 10~15ml
24Holes, "R1524"



(4) Swing Rotor ; 4×50ml, 12×1.5/2ml
& 10~15ml, 16×5~7ml "SR1550"
Included ⑤,⑥,⑦ / Option ④

Optional Tube Adapter

Specifications & Ordering information

Spec. \ Model		"Cef-D50.6" 6 Holes - 50ml or 12/24 Holes - 1.5~50ml	
Fixed Angle Rotor&Capa.	Included	(1) 6Hole ; 50ml Tubes	
	Option	(2) 12Hole ; (1.5~15)ml Tubes, (3) 24Hole ; (1.5~15)ml Tubes	
Swing Rotor & Capa.	Option	(4) SR1550 ; ⑤ 4×1Hole - 50ml, ⑥ 4×3Hole - 10~15ml, ⑦ 4×4Hole : 5~7ml, ⑥+④ 4×3Hole : 1.5/2.0ml	
Useful Tube size & Acceptance		(1) 6 Tubes ; 50ml	
		When Option Fixed Angle Rotor (2) 12 Tubes ; 1.5~15ml (3) 24 Tubes ; 1.5~15ml	When Option Swing Rotor ; (4) SR1550 ⑤ 4 Tubes : 50ml, ⑥ 12 Tubes : 10~15ml ⑦ 16 Tubes : 5~7ml ⑥+④ 12 Tubes : 1.5/2.0ml
Adapter and Size	Included	① 6ea×50ml Tubes, Size ; id30.7×L104mm	
	Option	When Option Fixed Angle Rotor ② 12/24ea×10~15ml Tubes Size ; id17.5×L95mm ③ 12/24ea×5~7ml Tubes Size ; id13.5×L69mm ④ 12/24ea×1.5/2ml Tubes Size ; id11×L42mm	When Option Swing Rotor ; ⑤ 4×1Hole - 50ml Tubes ⑥ 4×3Hole - 10~15ml Tubes ⑦ 4×4Hole - 5~7ml Tubes ⑥+④ 4×3Hole - 1.5/2.0ml Tubes
Speed Range (rpm) & RCF		600~4000rpm & 2,325×g (Swing Rotor ; 2,683×g)	
Motor		Brushless DC Motor	
Timer		0~30min	
Dimension & Weight		390×505×290mm, 19.8kg, Gross. 21.8kg	
Electric Reqts.		AC 230V, 50/60Hz or AC 120V, 60Hz	
Cat. No.	230V	DH.CefD0030	
	120V	DH.CefD0130	
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

Spare Rotor and Tube Adapter

		Ea. Price, ₩
DH.CefR5006	(1) 50ml 6Holes Angle Rotor "R5006" with 6ea×50ml Tube Adapter PP "TA50", id⌀30.7×L104mm, for **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefA050	① 50ml Tube Adapter PP "TA50", id⌀30.7×L104mm, Fit to Rotor "R5006", for Centrifuge **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefA015	② 10~15ml Tube Adapter PP "TA15", id⌀17.5×L98mm, for Centrifuge **"Cef-6"** & **"Cef-8"**, and Rotor **"R1512"** & **"R1524"**	

Optional Rotor and Tube Adapter

		Ea. Price, ₩
DH.CefR1512	(2) 10~15ml 12Holes Angle Rotor "R1512", with 12ea×10/15ml Tube Adapter "TA15", id⌀17.5×L98mm, for Centrifuge **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefR1524	(3) 10~15ml 24Holes Angle Rotor "R1524", with 24ea×10/15ml Tube Adapter "TA15", id⌀17.5×L98mm, for Centrifuge **"Cef-50.6"** & **"Cef-D50.6"**	
DH.CefSR1550	(4) Swing Rotor "SR1550", with Tube Adapter PP 1Hole×4ea×50ml "TA5001", 3Hole×4ea×1.5/2ml & 10~15ml "TA1503" and 4Hole×4ea×5~7ml "TA704", for Centrifuge **"Cef-D50.6"**	
DH.CefA007	③ 5~7ml Tube Adapter PP "TA7", id⌀13.5×L69mm, Fit to "TA15", Tube Adapter, for Centrifuge **"Cef-6"**, **"Cef-8"**, **"Cef-50.6"**, and **"Cef-D50.6"**	
DH.CefA002	④ 1.5/2ml Tube Adapter PP "TA2", id⌀11×L42mm, Fit to "TA15", "TA1503" Tube Adapter, for Centrifuge **"Cef-6"**, **"Cef-8"**, **"Cef-50.6"**, and **"Cef-D50.6"**	
DH.CefA5001	⑤ 50ml Tube Adapter PP "TA5001", Fit to Rotor "SR1550", for Cenfrifuge **"Cef-D50.6"**	
DH.CefA1503	⑥ 10~15ml 3Hole Tube Adapter PP "TA1503", Fit to Rotor "SR1550", for Centrifuge **"Cef-D50.6"**	
DH.CefA704	⑦ 5~7ml 4Hole Tube Adapter PP "TA704", Fit to Rotor "SR1550", for Centrifuge **"Cef-D50.6"**	

DAIHAN® −20+40℃ Chiller "MaXircu™ Chi", Heavy-duty Refrigerated External Circulator, Fill-17 · 29 · 47 Lit

Ideal for Evaporator/Reactor &c. Cooling Line, Lift 8 · 27m, Cooling Capa 0.87 · 1.3 · 3.0 kW, 다용도 냉각 써큘레이터/칠러

Max. Filling Volume 29Lit, "MaXircu™ Chi-30"

Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let ; ISO RC 1/2" Thread, Located On Rear-Upper Panel

※ See page 37 for the Cooling/Heating Transfer Fluid & Circulation Hose ;

▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid

▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid

▶ Insulated External Circulating Tubing

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Wide-range Reaction System and Evaporator.*** ■ ***Max. Lift 8 · 27m***
- ***Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let : ISO RC 1/2" Thread, Stainless-steel.***
- ***Digital PID Control System Implementing Superior Temperature Accuracy.***
- ***Embedded External Nozzle Part for the Prevention of Nozzle Damaged.***
- ***Stainless-steel Internal Bath for Prevention of Corrosion.***

∗ Wide-range Filling Volume 17Lit · 29Lit · 47Lit ∗ Effective Cooling Capacity
∗ Useful for 1~50Lit Various Reactors and Evaporators. ∗ Emergency Stop Button for safety.
∗ High Quality Circulation Pump : 20 · 30 Lit/min Max Flow Rate and 1.0-/3.3-bar Max. Pressure.
∗ Built in Pump Pressure Gauge and Compressor Pressure Gauge.

Specifications & Ordering information

Spec. \ Model		"MaXircu™ Chi-20" Filling Volume Max. Capa. 17Lit	"MaXircu™ Chi-30" Filling Volume Max. Capa. 29Lit	"MaXircu™ Chi-50" Filling Volume Max. Capa. 47Lit
Temp. Range & Stability		−20℃ ~ +40℃-Range, ±0.2℃(at 15℃)-Stability		
Cool-Fluid. Filling Volume		17 Lit max	29 Lit max	47 Lit max
Useful for 1~50Lit Evaporators, etc.		for 1~20Lit Evaporator	for 10~30Lit Evaporator	for 20~50Lit Evaporator
Refrigerator Capacity(HP)		1/2 HP	1 HP	2 HP
Lid & Top Opening Dia.		Φ100 mm		
Fluid In/Out-let Connector		ISO RC 1/2" (English System AG 1/2") Thread, Stainless-steel		
Pump Power, Lift Height, m	Max. Flow Rate	20 Lit/min	30 Lit/min	
	Max. Pressure & Lift	1.0 bar Max. Lift : 8m	3.3 bar Max. Lift : 27m	
Cooling Capacity	at +20℃	1.7 kW	2.8 kW	6.5 kW
	at 0℃	0.87 kW	1.3 kW	3.0 kW
	at −20℃	0.32 kW	0.45 kW	1.2 kW
External Dimension		450×650×h900 mm	580×800×h1260 mm	670×900×h1450 mm
Material		Internal : Stainless-steel, External : Powder Coated steel		
Electrical Reqts.		1 Phase 230V, 50 / 60 Hz		3Phase 380V
Cat. No.	60Hz	DH.Chi0020	DH.Chi0030	DH.Chi0050
	50Hz	DH.Chi0025	DH.Chi0035	DH.Chi0055
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

▶ Figure : One of the Applications in the Large Volume Evaporator Line.

DAIHAN Scientific

Desiccator Cabinet

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Desiccator, Auto-Dry ····· P. 48~49
, Gas Exchangeable ····· P. 47
, General Purpose ····· P. 47
, UV Protection Auto-Dry ····· P. 49
, Vacuum ····· P. 49
, Accessory, Silica-Gel ***New*** ····· P. 49

General Purpose Desiccator
"DeLL", 33Lit

Gas Exchangeable Desiccator
"DeBG1K", 207Lit

Auto-Dry Desiccator
"DeADLH", 33Lit

Auto-Dry Desiccator
"DeADAWS", 604Lit

UV Protection Auto-Dry Desiccator
"DeADLL.UV", 33Lit

Vacuum Desiccator
"DeVL", 12Lit

Articles	Cat. No	Description

2-Year Warranty

(1) Short-model

(2) Tall-model

DAIHAN® 33Lit General Purpose PMMA Desiccator, Short- & Tall-form
With ABS Frame · Shelf · Desiccant Tray, [Korean-made], 범용 PMMA 데시케이터

■ ***Excellent Viewing & Air Tight Structure ; Heavy-duty ABS(Acrylonitrile Butadiene Styrene Resin) Frame, 3mm Clear PMMA(Polymethyl Methacrylate Resin) Body Panel & 5mm Shelf, and Rubber Sealing Door.***

∗ Adjustable Shelf Quantity & Height / Distance.
∗ 2kg Shelf Load. ∗ 30mm Shelf Moving Interval.
∗ Including 1 Urea Tray 190×273mm for Silica-gel / Desiccant.

※ 운임 약 ₩ 6,000 별도!

(1) 33Lit Short-model "DeLL", 1-PMMA Shelf

		Ea.	Price, ₩
DH.DeLL	General Desiccator, Short-model, 33Lit, "DeLL" Outer : 450×330×h350mm, Inner : 400×305×h270mm		

(2) 33Lit Tall-model "DeLH", 3-PMMA Shelf

		Ea.	Price, ₩
DH.DeLH	General Desiccator, Tall-model, 33Lit, "DeLH" Outer : 330×330×h480mm, Inner : 270×305×h400mm		
DH.DeSH003	**Spare,** PMMA Shelf, for Short-model, 397×302×thick 5mm, Load 2kg		
DH.DeSH002	, for Tall-model , 267×302×thick 4mm, Load 2kg		

2-Year Warranty

(1) Bench-model

(2) Floor-model

with Digital Thermo-Hygrometer & Gas Valve

DAIHAN® 164 · 207 · 320 · 640 · 604Lit Gas Exchangeable PMMA Desiccator, 1 & 4 Room
With Digital Thermo-Hygrometer · Gas Valve · SUS Shelf, [Korean-made], 가스치환 데시케이터

■ ***Excellent Viewing & Air Tight Structure ; Heavy-duty Aluminium Frame, 5mm Clear PMMA(Polymethyl Methacrylate Resin) Body Panel, Stainless-steel Shelf, Caster, and Rubber Sealing Door.***

∗ Ideal for Sample Storage / precise Instrument / Semiconductive Articles / Low Humidity, Characterization Test, etc.
∗ 20kg Shelf Load. ∗ 50mm Shelf Moving Interval.
∗ Adjustable Shelf Quantity & Height / Distance.
∗ With Gas Valve / Gas Exchange / Stainless-steel Shelf / 1 Urea Tray 345×440mm for Desiccant / 1Digital Thermo-Hygrometer(But 4ea in 604Lit 4Room)

※ 운임 약 ₩ 16,000 별도!

(1) 164Lit Bench Model "DeBG2", 1Room - 1Door, 2Shelf, 2Gas Valve

		Ea.	Price, ₩
DH.DeBG2	164Lit Desiccator, Gas-Ex. "DeBG2", 1Room, 2Shelf Outer : 574×535×h765mm, Inner : 490×460×h730mm Including 2 Shelf, 1 Silica gel Tray, and 2 Gas Valve		

(2) 207Lit Floor Model "DeBG1K", 2Room - 2Door, 4Shelf, 2Gas Valve, Caster

		Ea.	Price, ₩
DH.DeBG1K	207Lit Desiccator, Gas-Ex. "DeBG1K", 2Room - 2Door, 4Shelf Outer : 574×535×h1070mm, Inner : 490×460×h920mm Including 4 Shelf, 1 Silica gel Tray, and 2 Gas Valve		

※ 운임 약 ₩ 30,000 별도!

(3) 320Lit Model "DeSS", 1Room - 2Door, 4Shelf, 2Gas Valve, Caster

		Ea.	Price, ₩
DH.DeSS	320Lit Desiccator, Gas-Ex. "DeSS", 1Room - 2Door Outer : 574×535×h1770mm, Inner : 490×460×h1420mm Including 4 Shelf, 1 Silica gel Tray, and 2 Gas Valve		

(4) 640Lit Model "DeWS", 1Room - 4Door, 8Shelf, 2Gas Valve, Caster

		Ea.	Price, ₩
DH.DeWS	640Lit Desiccator, Gas-Ex. "DeWS", 1Room - 4Door Outer : 1164×535×h1770mm, Inner : 490×460×h1420mm, 2Room Including 8 Shelf, 2 Silica gel Tray, and 2 Gas Valve		

(5) 604Lit Model "DeW4S", 4Room - 4Door, 8Shelf, 8Gas Valve, Caster

		Ea.	Price, ₩
DH.DeW4S	604Lit Desiccator, Gas-Ex. "DeW4S", 4Room - 4Door Outer : 1164×535×h1770mm, Inner : 490×460×h670mm, 4Room Including 8 Shelf, 4 Silica gel Tray, and 8 Gas Valve		

(6) Spare Thermo-Hygrometer and Stainless-steel Shelf

		Ea.	Price, ₩
DH.DeSH001	**Spare,** Stainless-steel Shelf, 20kg Load, 490×460mm		
DH.DeDHY	, Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH		

2-Year Warranty

(3) 320Lit 1Room-2Door

(4) 640Lit 1Room-4Door
(5) 604Lit 4Room-4Door

With Digital Thermo-Hygrometer & Gas Valve

Urea Tray
for Desiccant (Silica Gel)

Articles	Cat. No	Description

2-Year Warranty

(1) Short Auto-Dry

(2) Tall Auto-Dry

(3) Analog Dehumidifier Unit Included

DAIHAN® 33Lit Auto-Dry PMMA Desiccator, Short- & Tall-form, Dehumidifier ~25%RH
With ABS Frame · Digital Thermo-Hygrometer, [Korean-made], 자동 습도 조절 데시케이터

■ ***Excellent Viewing & Air Tight Structure ; Heavy-duty ABS(Acrylonitrile Butadiene Styrene Resin) Frame, 3mm Clear PMMA(Polymethyl Methacrylate Resin) Body Panel & 5mm Shelf, and Rubber Sealing Door.***

∗ Adjustable Shelf Quantity & Height / Distance.
∗ 2kg Shelf Load. ∗ 30mm Shelf Moving Interval.
∗ Built-In Analog Dehumidifier Unit ; Repeated Regeneration of Solid Silica Gel Improves Dehumidification Capacity.
∗ Power Supply : 220V, 50/60Hz, 3Watts.

※ 운임 약 ₩ 6,000 별도!

(1) 33Lit Auto-Dry Short-model "DeADLL", 1-PMMA Shelf

		Ea.	Price, ₩
DH.DeADLL	Auto-Dry Desiccator, Short-model, 33Lit, "DeADLL" Outer : 450×330×h350mm, Inner : 400×305×h270mm		

(2) 33Lit Auto-Dry Tall-model "DeADLH", 3-PMMA Shelf

		Ea.	Price, ₩
DH.DeADLH	Auto-Dry Desiccator, Tall-model, 33Lit, "DeADLH" Outer : 330×330×h480mm, Inner : 270×305×h400mm		
DH.DeSH003	**Spare,** PMMA Shelf, for Short-model, 2kg Load, 397×302×thick 5mm		
DH.DeSH002	, for Tall-model , 2kg Load, 267×302×thick 4mm		
DH.DeDHY	, Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH		
DH.DeHY	, (3) Analog Dehumidifier Unit ; ~25%RH		

2-Year Warranty

Analog Control, Digital Display

(2) 320Lit 1Room-2Door

(3) 604Lit 1Room-4Door

Dehumidification Unit

Digital Thermo Hygrometer

DAIHAN® 207 · 320 · 604Lit Auto-Dry PMMA Desiccator, Analog or Digital-Control, 15~60%RH
With Dehumidifier · Digital ℃ · %RH Meter · Al-Frame · 1Room, [Korean-made], 자동 제습 데시케이터

■ ***Excellent Auto-Dry / Viewing / Air Tight Structure ; Built-In Dehumidifier 15%~60%RH in Digital Control, Heavy-duty Aluminium Frame, 5mm Clear PMMA Body Panel, Stainless-steel Shelf 20kg Load, Caster, and Rubber Sealing Door.***

∗ Analog or Digital Controlled Dehumidifier Unit ; Repeated Regeneration of Solid Silica Gel Improves Dehumidification Capacity. ∗ Included 1-Dehumidifier.
∗ Ideal for Sample Storage / precise Instrument / Semiconductive Articles / Low Humidity, Characterization Test, etc.
∗ 20kg Shelf Load. ∗ Including 4 Stainless-steel Shelf.
∗ Adjustable Shelf Quantity & Height / Distance.
∗ Display : Digital Thermo-Hygrometer ; 1~99℃, 11%~99%RH
∗ Power Supply : 220V, 50/60Hz

※ 운임 약 ₩ 30,000 별도!

1) 207 · 320 · 604 Lit Analog Control Model, 20%~50%RH

		Ea.	Price, ₩
DH.DeADABG1K	(1) 207Lit Analog Auto-Dry Desiccator "DeADABG1K" 1Room - 1Door, 4Shelf Outer : 574×535×h1070mm, Inner : 490×460×h920mm		
DH.DeADASS	(2) 320Lit Analog Auto-Dry Desiccator "DeADASS" 1Room - 2Door, 4Shelf Outer : 574×535×h1770mm, Inner : 490×460×h1420mm		
DH.DeADAWS	(3) 604Lit Analog Auto-Dry Desiccator "DeADAWS" 1Room - 4Door, 8Shelf Outer : 1154×535×h1770mm, Inner : 490×460×h1420mm		

2) 207 · 320 · 604 Lit Digital Control Model, 15%~60%RH

		Ea.	Price, ₩
DH.DeADDBG1K	(4) 207Lit Digi. Auto-Dry Desiccator "DeADDBG1K" 1Room - 1Door, 4Shelf Outer : 574×535×h1070mm, Inner : 490×460×h920mm		
DH.DeADASS	(5) 320Lit Digi. Auto-Dry Desiccator "DeADDSS" 1Room - 2Door, 4Shelf Outer : 574×535×h1770mm, Inner : 490×460×h1420m		
DH.DeADDWS	(6) 604Lit Digi. Auto-Dry Desiccator "DeADDWS" 1Room - 4Door, 8Shelf Outer : 1154×535×h1770mm, Inner : 490×460×h1420mm		
DH.DeSH001	**Spare,** Stainless-steel Shelf, 20kg Load, 490×460mm		
DH.DeDHY	, Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH for (1) "DeADABG1K", (2) "DeADASS", (3)"DeADAWS"		

2-Year Warranty

Fully Digital Control

(6) 604 Lit, 1Room-4Door

Dehumidification Unit

Digital Control & Thermo Hygrometer

Articles	Cat. No	Description

(1) Short Auto-Dry

(2) Tall Auto-Dry

(3) Analog Dehumidifier Unit Included

DAIHAN® 33Lit UV Protected Auto-Dry PMMA Desiccator, Short- & Tall-model, ~25%RH

With Dehumidifier · Digital Thermo-Hygrometer · ABS Frame, [Korean-made], UV차단 자동 습도 조절 데시케이터

- ***Made of Transparent Amber PMMA Panel ; 520nm (or Less) UV Protection.***
- ***Good Viewing / Excellent Auto-Dry / Air Tight Structure ; Heavy-duty ABS Frame, 3mm Transparent Amber PMMA Body Panel & 5mm Shelf, ~25% Dehumidifier Unit, and Rubber Sealing Door.***

∗ Analog Controlled Dehumidifier Unit ; Repeated Regeneration of Solid Silica Gel Improves Dehumidification Capacity.
∗ Adjustable Shelf Quantity & Height / Distance. ∗ 2kg Shelf Load.
∗ Power Supply : 220V, 50/60Hz, 3Watts.

※ 운임 약 ₩ 6,000 별도!

(1) 33Lit Short-model "DeADLL.UV", UV Protect / Auto-Dry, 1-PMMA Shelf

		Ea.	Price, ₩
DH.DeADLL.UV	UV Protect / Auto-Dry Desiccator "DeADLL.UV", Short-model, 33Lit Outer : 450×330×h350mm, Inner : 400×305×h270mm		

(2) 33Lit Tall-model "DeADLH.UV", UV Protect / Auto-Dry, 3-PMMA Shelf

		Ea.	Price, ₩
DH.DeADLH.UV	UV Protect / Auto-Dry Desiccator "DeADLH.UV", Tall-model, 33Lit Outer : 330×330×h480mm, Inner : 270×305×h400mm		
DH.DeSH003	**Spare,** PMMA Shelf, for Short-model, 2kg Load, 397×302×thick 5mm		
DH.DeSH002	, for Tall-model , 2kg Load, 267×302×thick 4mm		
DH.DeDHY	, Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH		
DH.DeHY	, (3) Analog Dehumidifier Unit ; ~25%RH		

(1) 7Lit

(2) 9.2Lit

1) Upper Door Model

(3) 12Lit

(4) 30Lit

2) Front Door Model

(5) 48Lit

2) Front Door Model

(6) Gas Flowmeter

DAIHAN® 7~48Lit Vacuum PMMA Desiccator, Clear, with Press-Gauge

With Upper- or Front-Door, Approx - 1 Torr / 133Pa, [Korean-made], 진공 데시케이터

- ***Permissible Degree of Vacuum ; Approx -1 Torr / 133Pa***
- ***Made of 20 ~ 30mm Clear PMMA Panel, 2 Vacuum Valve, 1 Vacuum Gauge, Silicon & Rubber Sealing Door, Shelf, and 1 Desiccant Tray(270×144×h16mm for 7 / 9.2 / 12 Lit)***

∗ Two Vacuum Valve Φ8mm
∗ 1 Pressure Dial Gauge ; 0Bar ~ 1Bar±1.5%

※ 운임 약 ₩ 6,000 별도!

1) 7 & 9.2Lit Upper Door / Short-form, 20mm PMMA Panel

		Ea.	Price, ₩
DH.DeVS	(1) 7Lit Vacu. Desiccator "DeVS", 1Shelf, 1Tray Outer : 300×300×h170mm, Inner : 260×260×h100mm		
DH.DeVM	(2) 9.2Lit Vacu. Desiccator "DeVM", 1Shelf, 1Tray Outer : 260×260×h360mm, Inner : 210×210×h210mm		

2) 12 · 30 · 48Lit Front Door / Tall-form, 20~30mm PMMA Panel

		Ea.	Price, ₩
DH.DeVL	(3) 12Lit Vacu. Desiccator "DeVL", 20mm Panel, 2Shelf, 1Tray Outer : 310×225×h430mm, Inner : 260×180×h260mm		
DH.DeVLH	(4) 30Lit Vacu. Desiccator "DeVLH", 25mm Panel, 4Shelf, 1Tray(190×273×h18mm) Outer : 320×335×h600mm, Inner : 260×280×h410mm		
DH.DeVW	(5) 48Lit Vacu. Desiccator "DeVW", 30mm Panel 3Shelf, 1Tray(313×230×h20mm) Outer : 470×365×h600mm, Inner : 400×300×h400mm		

Gas Flowmeter, for Gas-Ex. Desiccator, 10ℓ/min

		Ea.	Price, ₩
DH.DeFL	(6) Gas Flowmeter 10ℓ/min, Size 70×170mm with Bracket & 2 Fitting for Φ6mm Tubes		

(1)

(2)

(3)

Silica-Gel Blue & White, Good for Desiccant Purification

		Pk.	Price, ₩
DH.7510.1405	(1) Silica-gel Blue, Indicat-5~10mesh, cp, 500g *New*	500g	
DH.7510.1400	(2) , 1kg *New*	1kg	
DH.7513.1405	(3) Silica-gel White, 5~10mesh, cp, 500g *New*	500g	
S19.401	(4) , Non-woven Fabric Bag, 20g	10ea	

(4)

DAIHAN Scientific

Electrophoresis

Gel Documentation System - Portable ..... P. 51
- Unified ..... P. 52
UV Transilluminator ..... P. 53
Accessory - UV-intensity Meter ..... P. 53
- UV-indicator ..... P. 53

Gel Documentation System

Portable Gel Documentation System

"WGD-20"

1.45M Pixel CCD Camera

Gel Imaging System

Built-in Transilluminator

"MaXidoc™ G2"

1.45M Pixel CCD

UV Transilluminator

Standard Case-type

"WUV-L50"

DAIHAN® Portable Gel Documentation System "WGD-20", 1.45M Pixel CCD Camera, with Certi. & Traceability

With Digital CCD Camera & Optical Lens, Portable Darkroom Hood, Capture Software, USB Interface

젤이미지 분석 시스템, 고성능/최저가, 디지털 CCD 카메라(145만 화소) 장착

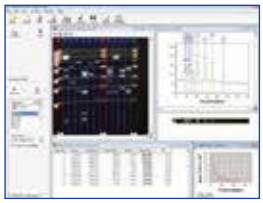
Portable Gel Documentation System "WGD-20"

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL(Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***The Most Cost-Effective System***
- ■ ***High Precise and Large Caliber Optical Lens with Zoom, Focus and Iris Control are Used***

* DNA, RNA gel Imaging Capture and Analysis
* Digital CCD Camera (Resolution 1.45 Million pixel) with Portable Darkroom is Offered
* 1360×1024, 10-bit CCD, Available for 8-bit Gray Level Image Capturing
* Power Consumption : Supplied USB(USB 3.0)
* Very Compact Portable Darkroom System Enables the Existing Transilluminators in the Lab to be used together with this system. High Flexibility in use is Offered
* USB 3.0 Interface is available, through which Real-Time Images are transferred directly to PC
* Software : Easy and Fast Capture of Gel Image
* TotalLab™ Software : Fully Automatic, Single Button Press Complete Image Analysis in Interesting Area(Optional)

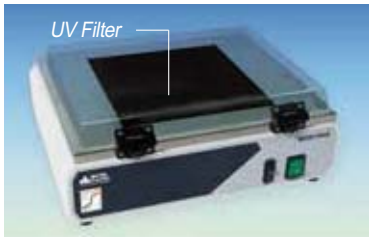
※ Computer System Requirements

- Intel Chipset, USB 2.0 Support Mainboard
- Over Pentium 4 Processor
- Over 256MB Main Memory
- Over 60MB Space of HDD for Installation and Running
- Window XP, Vista & 7, 8, 10



MaXidoc™ Imaging Capture S/W

: Included S/W, Real-Time Image Viewing/Capture, Manipulate and Save Images



(1) UV Transilluminator(Optional)

Specifications & Ordering information

Spec. \ Model		"WGD-20"	"WGD-20S" Included DNA Analysis S/W
CCD Module	CCD & Pixel Size	1/2″ CCD, 4.65×4.65 um	
	Max. Resolution	1360×1024	
	Lens Mount & Optical Size	C mount, 7.6×6.2 mm	
	Connect to PC & Power	USB 3.0, Supplied USB	
Zoom Lens	Iris & Focal Length	F1.0 - Close, 8~48mm	
	Ambient Temp.	−10℃ to +50℃	
Overall	Dimension & Weight	300×260×h470 mm, 9 kg	
	Software Capability	Windows XP, Vista & 7, 8, 10	
Included Standard S/W		Included MaXidoc™ Gel Imaging Capture Software	
Included DNA Analysis S/W		none	TotalLab™ CLIQS
Packing Size & Weight		400×350×h510 mm, 18 kg	
Cat. No.		DH.WGD00020	DH.WGD00024
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

Optional Transilluminator & S/W

		Ea. Price, ₩
DH.WUV00020	(1) Transilluminator, **"WUV-L20",** 20×20cm Filter 312nm, 15W UV Lamp×6ea	
DH.WUV00050	(1) Transilluminator, **"WUV-L50",** 20×20cm Filter 365nm+312nm, 15W UV Lamp×6ea	
DH.WUV00120	(1) Transilluminator, **"WUV-M20",** 20×20cm Filte 312nm, 8W UV Lamp×6ea	
DH.WGD00100	(2) DNA/Protein Analysis S/W, **TotalLab™ CLIQS**	
DH.WGD00121	(3) , **CLIQS 1D Pro**	
DH.WGD00200	LapTop Computer, **WGD-Laptop,** for WGD Gel Doc.System	

DNA Analysis S/W

(2) TotalLab™ CLIQS

■ Automatic and Manual Lane Detection, Background Subtraction
Fully Automatic Band Detection, Molecular Size / pI Calibration
Quantity Calibration, Normalization

(3) CLIQS 1D Pro (additional function)

■ Match Band Data Patterns across Large Groups of Lanes
Choice of Algorithms to Generate Dendrograms : NeighborJoining, UPGMA, Complete Linkage, Single Linkage, Ward Library, Queries Function

One Stop Analysis

Articles	Cat. No	Description

DAIHAN® Gel Imaging System "MaXidoc™ G2", Built-in Transilluminator, 1.45M Pixel, 4.65㎛, F1.0, 8~48mm Manual Zoom With Capture Software, High-quality CCD Camera & Optical Lens, Auto Control System, USB Connection, Certi. & Traceability

이미지 분석 시스템, 자외선 발산기 일체형, 디지털 CCD 카메라(145만 화소) 장착

"MaXidoc™ G2" Gel Imaging System, Built-in Transilluminator

- ■ ***Made in Korea*** ■ ***PL(Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ■ ***Complete System with 1.45M Pixel Digital CCD Camera, Safety Darkroom Hood and Built-in Transilluminator(UV Type or LED Type)***
- ■ ***High-quality F1.0 Optical Lens with 8~48mm Manual Zoom, Focus and Iris Control is Used.***
- ■ ***Included Maxidoc™ Gel Imaging Capture Software.***

∗ Ideal for Various Applications of DNA, RNA Protein Gel Imaging Capture and Analysis.
∗ Unified Darkroom System with Built-in Sliding Transilluminator offers very safety and convenience in use
∗ Built-in Single Wave Transilluminator(UV Type) : 312nm, 6×8W UV Lamps and ETI White LED×3Ea
∗ Built-in Single Wave Transilluminator(LED Type) : 470nm, Blue LED×324Ea, 35W
∗ 1360×1024 CCD Resolution ∗ Can be Used with Tablet PC(Optional)
∗ USB 2.0 Interface is Available through Which Real-time Images are Transferred Directly to PC

MaXidoc™ Imaging Capture S/W

: Included S/W, Real-Time Image Viewing/Capture, Manipulate and Save Images

Specifications & Ordering information

Spec. \ Model	"MaXidoc™ G2"	
Transilluminator Type	Standard UV Type	Blue LED Type
Camera Resolution	1.45 Mega Pixel CCD	
Pixel Size	4.65㎛	
Lens	F1.0 Fixed, 8~48mm Manual Zoom	
Transilluminator	312nm, 6×8W UV Lamps, Filter Size : 210×260mm	470nm, Blue LED×324Ea, Filter Size : 210×260mm
Software	Included MaXidoc™ Gel Imaging Capture Software	
White Light	3×LED Lamps	
PC Interface(OS)	Window7 or Window10 64bit	
Camera Interface	USB 2.0	
Dimension & Weight	360×380×h700 mm, 24 kg	
Packing Size (mm) & Gross Weight (kg)	430×490×h830 mm, 28 kg	
Electric Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	
Cat. No. 230V	**DH.WGD00300**	**DH.WGD00310**
Cat. No. 120V	**DH.WGD00301**	**DH.WGD00311**
Price, Each. ₩		

∗ **Other Specifications are available upon Customer's Request.**

Optional Software/Transilluminator/White Light Table

		Ea. Price, ₩
DH.WGD00100	(1) DNA/Protein Analysis S/W, **TotalLab™ CLIQS**	
DH.WGD00121	(2) , **CLIQS 1D Pro**	
DH.WUV01110	UV Lamp, 365nm, 8W	
DH.WUV02110	, 312nm, 8W	

DNA Analysis S/W

(1) TotalLab™ CLIQS

■ Automatic and Manual Lane Detection, Background Subtraction
Fully Automatic Band Detection, Molecular Size / pI Calibration
Quantity Calibration, Normalization

(2) CLIQS 1D Pro (additional function)

■ Match Band Data Patterns across Large Groups of Lanes
Choice of Algorithms to Generate Dendrograms : NeighborJoining, UPGMA, Complete Linkage, Single Linkage, Ward Library, Queries Function

One Stop Analysis

DAIHAN® UV Transilluminator "WUV", Standard- & Compact Case-type, 48W/90W
With Hinged UV-Blocking Safety Cover, Robust, Versatile, 312 · 365 · 312+365 nm, with Certi. & Traceability
자외선 발산기, 기본형 핵산(DNA, RNA), 스탠다드-/컴팩트-케이스 타입

(1) Transilluminator, Standard Case "WUV-L" Model

(2) Transilluminator, Compact Case "WUV-M" Model

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Low Cost, Robust, Versatile, Affordable & Gentle Excitation***
- ***Hinged UV-Blocking Safety Cover Protects User from UV Radiation***
- ***Stainless-steel Frame and Robust Steel Housing***

∗ Ideal for Standard Gel Documentation and Preparative Work, especially for Detection of very small amount of DNA & RNA Stained by EtBr
∗ Long-Life Electronic (Low Heat, no Flickering) ∗ High (100%) / Low (75%) Intensity Switch

Specifications & Ordering information

Spec. \ Model		"WUV-L10" Single 365 nm	"WUV-L20" Single 312 nm	"WUV-L50" Dual 365+312 nm	"WUV-M10" Single 365 nm	"WUV-M20" Single 312 nm
Body Size-type		(1) Standard Case-type			(2) Compact Case-type	
Dimension		495×330×h95 mm			350×275×h95 mm	
Filter Size		200×200 mm				
Wave Length		Single 365 nm	Single 312 nm	Dual 365+312 nm	Single 365 nm	Single 312 nm
UV Lamps		15W×6ea (90W)			8W×6ea (48W)	
Power Consumption		95 W			52 W	
Weight		10 kg			8 kg	
Packing Size (mm) & Gross Weight (kg)		520×380×h220 mm, 12 kg			380×320×h220 mm, 10 kg	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz				
Cat. No.	230V	DH.WUV00010	DH.WUV00020	DH.WUV00050	DH.WUV00110	DH.WUV00120
	120V	DH.WUV02010	DH.WUV02020	DH.WUV02050	DH.WUV00210	DH.WUV00220
Price, Each. ₩						

∗ **Other Specifications are available upon Customer's Request.**

Spare UV Lamp

		Ea. Price, ₩
DH.WUV01010	UV Lamp, 365nm, 15W, for **"WUV-L10/-L50", "UVL365"**	
DH.WUV01020	, 312nm, 15W, for **"WUV-L20/-L50", "UVL312"**	
DH.WUV01110	, 365nm, 8W, for **"WUV-M10", "UVM365"**	
DH.WUV02110	, 312nm, 8W, for **"WUV-M20", "UVM312"**	

UV-intensity Meter

Custom® Digital UV-intensity Meter, 1999~19,990㎼-/cm²
With UV Sensor, 70×25×h131mm, 335g, **디지털 자외선 강도계**

■ ***Supplied by LMS® in Japan***

∗ Range(㎛W/cm2): 1999 · 19990 ∗ Accuracy: ±(4%rdg+2 dgt)
∗ Wavelength Sensitivity Characteristics : 290-390 nm ∗ Sampling : 2.5time/sec
∗ Size : Body / 70×25×131mm, Sensor / 46×27×168mm, Cord Length / 700mm
∗ Measurement of UVA, UVB is Possible
∗ Separated Sensor enables you to Measure from Further.

		Ea. Price, ₩
AS1.6395.11	"UV340" Meter, Digital, UV-intensity	

UV-indicator Dot Label

Jayu® UV-indicator Dot Label, Φ18mm, 자외선 감시 라벨

■ ***Supplied by LMS® in Japan***

∗ Original Color → Discoloration : UV-L / Clear(White) → Reddish Brown, UV-M / Clear(White) → Pink, UV-H / Clear(White) → Orange, UV-S / Clear(White) → Red
∗ Labels Change Color by UV and keep Remaining Once Discolored.
∗ The Back has Special Adhesives so that it can Stick Easily. ∗ Quantity : 1pack (100sheet)

		Pk. Price, ₩
AS6.7789.03	"UV.S" Label UV-indicator Dot, for UV-lamp	100ea
AS6.7789.04	"UV.L" , Solar	100ea

DAIHAN Scientific

Evaporator

Evaporator Circulator Cooler "Chiller" ····· P. 60

Evaporator Cooler and Vacuum Aspirator ····· P. 61

Rotary Vacuum Evaporator, 0.1 ~ 5 Lit *New* ····· P. 55~56

, 0.5 ~ 2 Lit ····· P. 57

, 5 · 10 · 20 Lit ····· P. 58

, 50 Lit ····· P. 59

▶ **Installation Figure : 20Lit Evaporator with Chiller & Vacuum Pump**

PREMIUM EVAPORATOR Wide-range Capacity "Eva-05"

DAIHAN® PREMIUM

Rotary Vacuum Evaporator NEW

For 0.1~5Lit Evaporating Flasks

Programmable Electric Automatic Lifting
Up to 195mm, Digital Display Height

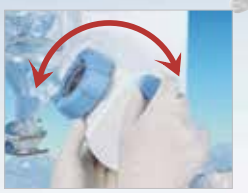
Adjustable Immersion Angle & Automatic Reverse Rotation

1,600cm² Vertical High Cooling Capacity

- 1,600cm² Cooling Surface Condenser.
- Superior Evaporation Capacity : 51.6ml/min(Water)

10-Step Adjustable Wide Immersion Angle

- Adjustable 10-Step Wide Immersion Angle 1° ~ 50°



Automatic Reverse Rotation

- Rotated Direction of Evaporating Flask Can be Reversed (Clockwise or Counter-Clockwise)
- Programmable Rotation Cycle Time for User Convenience

Interchangeable Detachable Heating Bath

- Separable Bath Structure from Digital Controller for User Safety and Convenience

Possible to Use a Heating Bath by Itself !

Programmable Electric Automatic Lifting

- Adjustable Electric Automatic Lifting : Up to 195mm to Accommodate Changing Flask
  - Programmable Prefer Height
  - Digital Display the Height for User Convenience
  - Automatic Raising when Power Error for Sample Protection

Individual Digital Control

- Evaporator and Heating Bath have the Individual Digital Control System for User Convenience.
- Heating Bath can be used in Other Applications Widely.

0.1~5.0 Lit Wide Range Capacity

- Designed for Using 0.1~5Lit Evaporating Flasks Up to 200℃
  - 2.5Lit Oil Bath(Included) : for 0.1~2Lit Flasks
  - 5.5Lit Oil Bath(Optional) : for 2~5Lit Flasks

up to 2Lit

up to 5Lit

Articles	Cat. No	Description

DAIHAN® 0.1~5Lit PREMIUM Rotary Vacuum Evaporator "Eva-05", Vertical-type, 195mm Auto Lifting NEW

With 2.5Lit Heating Bath(Option 5.5Lit Bath), Up to 200℃, Cooling Surface 1,600cm², 10-Step Immersion Angle 1°~50°, and Automatic Reverse Rotation Function ; Clockwise or Counter Clockwise, 10~300rpm, 프리미엄 회전 진공 농축기

Premium Rotary Evaporator, with 2.5Lit Oil Bath(Included), for 0.1~2Lit Evaporating Flask

Premium Rotary Evaporator, with 5.5Lit Oil Bath(Optional), for 2~5Lit Evaporating Flask

Optional Oil Bath, 5.5Lit, for 2~5Lit Evaporating Flask

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***Patented Jog Dial & Touch Button Control System***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Distilling(Mixed) Solvent, Condensation Solution, and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.***
- ***Designed for Using 0.1~5Lit Evaporating Flasks, up to 200℃***
  - ***2.5Lit Oil Bath(Included) : for 0.1~2Lit Evaporating Flasks.***
  - ***5.5Lit Oil Bath(Optional) : for 2~5Lit Evaporating Flasks.***
- ***Automatic Reverse Rotation Function : Clockwise or Counter Clockwise***
- ***Adjustable Wide Immersion Angle : 10 Steps, 1° ~ 50°***
- ***No Grease is needed for the Flask Connection of Vapor Duct due to Teflon & Viton O-ring Gasket.***

∗ Evaporator and Heating Bath have the individual Digital Control System.
∗ Separable Bath Structure from Digital Controller for User Safety and Convenience
∗ Embedded Heating Elements for Bath
∗ High Cooling Surface Condenser : 1,600cm², 51.6ml/min
∗ Adjustable Electric Automatic Lifting : Up to 195mm to Accommodate Changing Flask
- Programmable Prefer Height
- Digital Display the Height for User Convenience
- Automatic Raising when Power Error for Sample Protection

∗ Rotary Evaporators can be Set with Circulation Aspirator Pump (P. 61)

Specifications & Ordering information

Spec. \ Model		"Eva-05" 0.1~5Lit Flask
Condenser Type		Vertical-type
Flaskts	Evaporating	0.1~5Lit, Included 1Lit Evaporating Flask
	Receiving	0.1~3Lit, Included 1Lit Receiving Flask
Controller & Display		PID Controller, Digital Display
Rotation Speed		10~300rpm
Evaporating Capability		51.6 ml/min
Cooling Surface		1,600cm²
Heating Bath Capacity & Temp. Range	Standard (Included)	2.5Lit Oil Bath, Up to 200℃, for 0.1~2Lit Evaporating Flasks External(215×205×h179mm), Internal(197×187×h117mm)
	Optional	5.5Lit Oil Bath, Up to 200℃, for Max 5Lit Evaporating Flasks External(324×269×h209mm), Internal(305×250×h118mm)
Lifting Type		Adjustable Automatic Electric Lifting : up to 195mm Programmable Prefer Height and Digital Display Height
Immersion Angle		Adjustable 10-step Angle 1° ~ 50°
Vacuum Seal		Double Sealing Rings made of Teflon + Viton Material
Power Consumption		Rotation Motor(100W), Heating Bath : Included 2.5Lit Bath(1,200W/220V, 1,100W/110V), Optional 5.5Lit Bath(1,500W/220V, 1,100W/110V)
Material	Housing	Aluminum Die Casting
	Heating Bath	External(PBT), Internal(Ceramic-coated SUS304)
Dimension & Net Weight		510×438×h519(Max. 714)mm, 16kg
Electrical Reqts.		AC220V, 50/60Hz or AC110V, 60Hz
Cat. No.	230V	DH.Eva0005
	120V	DH.Eva0005.1
Price, Set. ₩		

Optional Heating Bath

		Ea. Price, ₩
DH.Bat005	(a) Oil Bath & Base Digital Controller Set, 5.5Lit, Up to 200℃ External(324×269×h209mm, PBT), Internal(305×250×h118mm, Ceramic-coated SUS304) Controller(190×292×h80mm, PBT)	
DH.Bat005.1	(b) Oil Bath Only, without Digital Controller, 5.5Lit, Up to 200℃, External(324×269×h209mm, PBT), Internal(305×250×h118mm, Ceramic-coated SUS304)	

※ *NOTE!* ▶ *Optional Vacuum Pump for Evaporator : See the "Pump" Section.*
▶ *For the Information of Spare Parts : Visit www.DAIHAN-Sci.com Shopping Mall or Contact Us Directly.*

DAIHAN® 0.5~2 Lit Digital Rotary Evaporator "WEV-1001V" & "WEV-1001L", Vertical & Diagonal-type

With 6.5 Lit Digital Bath 100℃, PID Control & Lifting Table, 10~180rpm, Cooling Surface 1,300 cm², Certi. & Traceability, 회전식 증발 농축기

(1) Digital Rotary Evaporator, Vertical-type "WEV-1001V", 0.5 ~ 2 Lit

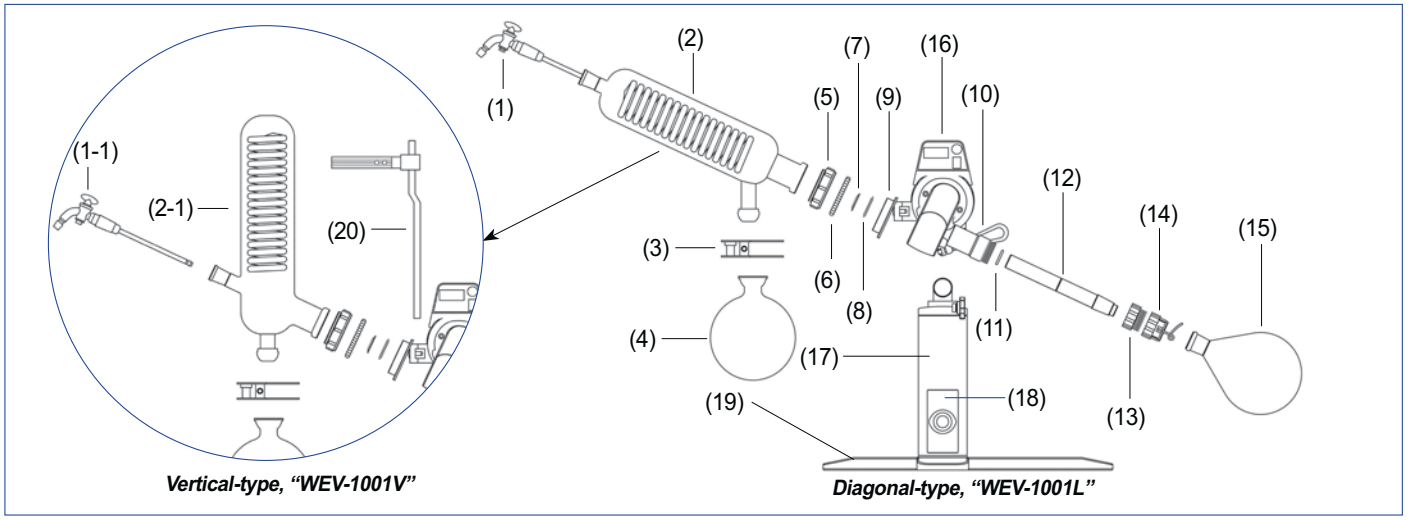
(2) Digital Rotary Evaporator, Diagonal-type "WEV-1001L", 0.5 ~ 2 Lit

- ***Cooling Surface 1,300 cm²***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Distilling (Mixed) Solvent, Condensation Solution and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.***
- ***Included Two Evaporating Flasks : 1×0.5Lit & 1×1Lit***
- ***The Temperature adopts PID Control, which ensures accurate Temperature Control.***
- ***Speed Display, Operate Visually and easily***

* Digital Speed Display, Digital Temp. Display on Water Bath.
* Double Sealing with PTFE and Vinton Materials to ensure High Vacuum Degree.
* The Air Extraction Nozzle of Condenser is set down, and it is Safer after Connection with Vacuum Pipe
* Building Block Design is Easily to be Extended.
* Easy Operation of Lifting, Move up and Down Smoothly and Easy to Lock.
* Dedicated Electric Machinery, Worm and Gear Drive Steadily.
* The Separation of Bath and the Mainframe makes Configure Flexible.
* These Rotary Evaporators could Set with Circulation Aspirator Pump (P. 61)

Specifications & Ordering information

Spec. \ Model		"WEV-1001V" Vertical-type	"WEV-1001L" Diagonal-type
Condenser Type		Vertical-type	Diagonal-type
Bottle Capacity	Evaporating	Included 2×Evaporating Flasks : 1×0.5Lit & 1×1Lit, Available 100-/250-ml, 2Lit Evaporating Flask(Optional)	
	Receiving	Included 1ea 1 Lit Flask	
Rotary Speed		10 ~ 180 rpm	
Evaporating Capability		20 ml/min	
Cooling Surface		1,300 cm²	
Achievable Vacuum		399.9Pa(below 3mmHg)	
Bath Capacity		6.5 Lit / Φ254×130 mm	
Temp. Range		0℃ ~ 100℃	
Functional of Lifting Table		Weight Balancing Gliding Elevating & Manual Lifting	
Elevating Stroke		100 ~ 250 mm	
Vacuum Sealing		Double Sealing Rings made of Teflon + Vinton Materials	
Power Consumption		Motor : 25 W, Heater : 1.05kW	
Controller & Display		PID Controller, Digital display	
Dimension & Net Weight		560×320×h660mm / 9.5 kg	750×320×h540mm / 9.5 kg
Electrical Reqts.		AC220V, 50/60Hz or AC110V, 60Hz	
Cat. No.		DH.WEV01001V	DH.WEV01001L
Price, Each. ₩			



Vertical-type, "WEV-1001V"

Diagonal-type, "WEV-1001L"

※ NOTE! ▶ *Optional Vacuum Pump for Evaporator : See the "Pump" Section.*
▶ *For the Information of Spare Parts : Visit www.DAIHAN-Sci.com Shopping Mall or Contact Us Directly.*

DAIHAN® 5 · 10 · 20 Lit Digital Rotary Evaporator "WEV-1005 · "WEV-1010" · "WEV-1020", Large Capacity

With Digital Controlled Stainless-steel Bath 99℃, Electric Lift Bath, Vertical-type, 20~130 rpm, 대용량 회전식 증발 농축기

Digital Rotary Evaporator, Large Capa.
"WEV-1005" 5Lit

Digital Rotary Evaporator, Large Capa.
"WEV-1010" 10Lit, "WEV-1020" 20Lit

- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Distilling (Mixed) Solvent, Condensation Solution and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.***
- ***Teflon (PTFE) and Fluorine Rubber Dual Rotating Seal, Patented Technology to ensure High Vacuum.***
- ***A Vacuum Switching Valve : without Affecting the System Vacuum, Distillation of the Situation and the Solution can be Continuously Collected.***
- ***Electric Lift - Stainless-steel Water Bath, Easy to Use.***
- ***Cooling Surface : "WEV-1005" total 2,700 cm²***
  "WEV-1010" total 6,500 cm²
  "WEV-1020" total 11,500 cm²

∗ Accurate and Reliable Temp. Control due to the Introduction of Advanced Frequency Control System
∗ PTFE Discharge Valve, Corrosion Resistance, Pollution-free.
∗ Rotary Evaporators can be Set with Circulation Aspirator Pump (P.61)

Specifications & Ordering information

Spec. \ Model		"WEV-1005" Evaporating Flask 5Lit	"WEV-1010" Evaporating Flask 10Lit	"WEV-1020" Evaporating Flask 20Lit
Evaporating Flask		**5 Lit**, Flange Opening Φ50 mm	**10 Lit**, Flange Opening Φ95 mm	**20 Lit**, Flange Opening Φ125 mm
Receiving Flask		3 Lit	5 Lit	10 Lit
Condenser		Water Refrigerating	Standing, Main & Auxiliary Cooling and Highly Efficient 3 Circulating Cold Trap	
Temp. Range		0℃ ~ 99℃		
Rotary Speed		20 ~ 140 rpm	20 ~ 130 rpm	
Evaporating Capability		Water : 2 Lit/h, Alcohol : 4 Lit/h	Water : 3.2 Lit/h, Alcohol : 6.5 Lit/h	Water : 5 Lit/h, Alcohol : 11 Lit/h
Cooling Surface		Condenser 2,700 cm²	Main Condenser 4,500 cm² Auxiliary Condenser 2,000 cm²	Main Condenser 8,000 cm² Auxiliary Condenser 3,500 cm²
Achievable Vacuum		399.9Pa(below 3mmHg)		
Functional of Lifting Table		Electric		
Elevating Stroke		0 ~ 150 mm	0 ~ 160 mm	0 ~ 190 mm
Vacuum Sealing		PTFE and Fluorine Rubber Dual Rotating Seal		
Motor		250 W, Phase DC Induction Motor		
Heating Boiler		Stainless-steel Water Bath		
Display		Digital display		
Power Consumption		2.3 kW	1Phase 220V, 3.8kW or 3Phase 380V, 6.3kW	
Dimension (mm)		835×400×h1090	990×550×h1655	1195×635×h2070
Electrical Reqts.		1Phase 220V, 50/60Hz	1Phase 220V, 50/60Hz or 3Phase 380V, 50Hz	
Cat. No.	230V	**DH.WEV01005**	**DH.WEV01010**	**DH.WEV01020**
	3Phase	-	**DH.WEV01011**	**DH.WEV01021**
Price, Each. ₩				

※ 운임 약 ₩ 9,000 별도!

※ *NOTE!* ▶ *Optional Vacuum Pump for Evaporator : See the "Pump" Section.*
▶ *For the Information of Spare Parts : Visit www.DAIHAN-Sci.com Shopping Mall or Contact Us Directly.*

DAIHAN® 50 Lit Digital Rotary Evaporator "WEV-1050", Large Capacity, Vertical Type, with Electric & Manual Lift Bath

With Digital Controlled Stainless-steel Bath 99℃, 20~110 rpm, 19 Lit/h, Cooling Surface 14,500 cm², **대용량 회전식 증발 농축기**

Digital Rotary Evaporator, Large Capa.
"WEV-1050", 50 Lit

- ***Cooling Surface : 14,500 cm²***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Distilling (Mixed) Solvent, Condensation Solution and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.***
- ***Large Capacity & Diameter Rotary Evaporator Flask - 50Lit***
- ***Teflon (PTFE) and Fluorine Rubber Dual Rotating Seal, Patented Technology to Ensure High Vacuum.***
- ***Stainless-steel Water Bath - Electric & Manual Lift, Easy to Use***

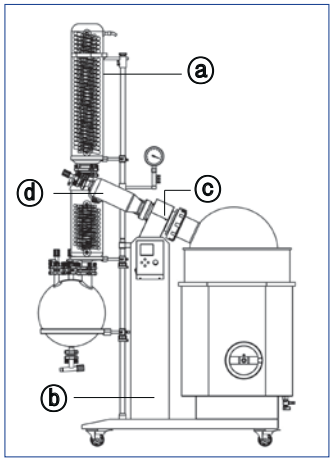
∗ The Introduction of Foreign Advanced Frequency Control System, Temperature Control System, Accurate and Reliable.
∗ A Vacuum Switching Valve, without Affecting the System Vacuum Distillation of the Situation and the Solution can be Continuously Collected.
∗ Water Bath Electric Lift and Manual Lift Support, Easy to Use.
∗ PTFE Discharge Valve, Corrosion Resistance, Pollution-free.
∗ This Rotary Evaporator could Set with Circulation Aspirator Pump (P.61)

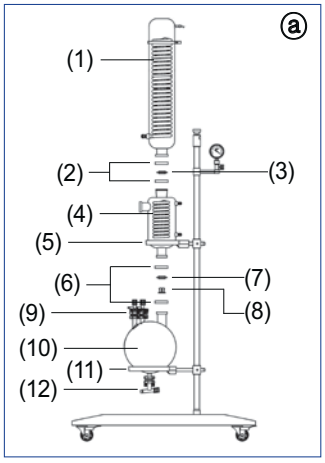
Specifications & Ordering information

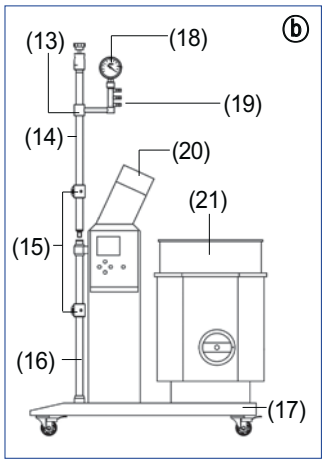
Spec. \ Model	"WEV-1050"
Evaporating Flask	**50 Lit**, Flange Opening Φ125 mm
Receiving Flask	20 Lit
Condenser	Standing, Main & Auxiliary Cooling and Highly Efficient 3 Circulating Cold Trap
Temp. Range & Rotary Speed	0℃ ~ 99℃, 20 ~ 110 rpm
Evaporating Capability	Water : 9 Lit/h, Alcohol : 19 Lit/h
Cooling Surface	Main Condenser 9,500 cm² Auxiliary Condenser 5,000 cm²
Achievable Vacuum	399.9Pa(below 3mmHg)
Functional of Lifting Table & Stroke	Electric & Manual, 0 ~ 180 mm
Vacuum Sealing	PTFE and Fluorine Rubber Dual Rotating Seal
Motor	250 W, Phase DC Induction Motor
Heating Boiler	Stainless-steel Water Bath
Display	Digital display
Dimension (mm)	1345×770×h2140
Electrical Reqts.	6.3 kW, 3Phase 380V, 50Hz
Cat. No.	DH.WEV01050
Price, Each. ₩	

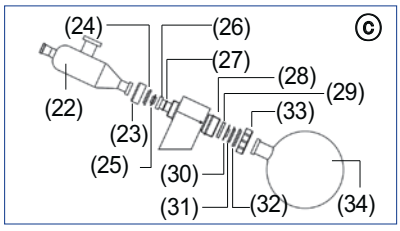
※ **운임 약 ₩ 9,000 별도!**

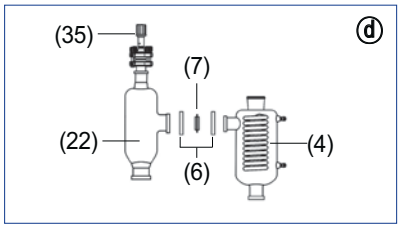
The Details of Spare Parts for 50 Lit Digital Rotary Evaporator "WEV-1050" models











※ *NOTE!* ▶ *Optional Vacuum Pump for Evaporator : See the "Pump" Section.*
▶ *For the Information of Spare Parts : Visit www.DAIHAN-Sci.com Shopping Mall or Contact Us Directly.*

DAIHAN® −20+40℃ Chiller "MaXircu™ Chi", Heavy-duty Refrigerated External Circulator, Fill-17 · 29 · 47 Lit

Ideal for Evaporator/Reactor &c. Cooling Line, Lift 8 · 27m, Cooling Capa 0.87 · 1.3 · 3.0 kW, 다용도 냉각 써큘레이터/칠러

Max. Filling Volume 29Lit, "MaXircu™ Chi-30"

Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let ; ISO RC 1/2" Thread, Located On Rear-Upper Panel

※ See page 37 for the Cooling/Heating Transfer Fluid & Circulation Hose ;

▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid

▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid

▶ Insulated External Circulating Tubing

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Wide-range Reaction System and Evaporator.*** ■ ***Max. Lift 8 · 27m***
- ***Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let : ISO RC 1/2" Thread, Stainless-steel.***
- ***Digital PID Control System Implementing Superior Temperature Accuracy.***
- ***Embedded External Nozzle Part for the Prevention of Nozzle Damaged.***
- ***Stainless-steel Internal Bath for Prevention of Corrosion.***

∗ Wide-range Filling Volume 17Lit · 29Lit · 47Lit ∗ Effective Cooling Capacity
∗ Useful for 1~50Lit Various Reactors and Evaporators. ∗ Emergency Stop Button for safety.
∗ High Quality Circulation Pump : 20 · 30 Lit/min Max Flow Rate and 1.0-/3.3-bar Max. Pressure.
∗ Built in Pump Pressure Gauge and Compressor Pressure Gauge.

Specifications & Ordering information

Spec. \ Model		"MaXircu™ Chi-20" Filling Volume Max. Capa. 17Lit	"MaXircu™ Chi-30" Filling Volume Max. Capa. 29Lit	"MaXircu™ Chi-50" Filling Volume Max. Capa. 47Lit
Temp. Range & Stability		−20℃ ~ +40℃-Range, ±0.2℃(at 15℃)-Stability		
Cool-Fluid. Filling Volume		17 Lit max	29 Lit max	47 Lit max
Useful for 1~50Lit Evaporators, etc.		for 1~20Lit Evaporator	for 10~30Lit Evaporator	for 20~50Lit Evaporator
Refrigerator Capacity(HP)		1/2 HP	1 HP	2 HP
Lid & Top Opening Dia.		Φ100 mm		
Fluid In/Out-let Connector		ISO RC 1/2" (English System AG 1/2") Thread, Stainless-steel		
Pump Power, Lift Height, m	Max. Flow Rate	20 Lit/min	30 Lit/min	
	Max. Pressure & Lift	1.0 bar Max. Lift : 8m	3.3 bar Max. Lift : 27m	
Cooling Capacity	at +20℃	1.7 kW	2.8 kW	6.5 kW
	at 0℃	0.87 kW	1.3 kW	3.0 kW
	at −20℃	0.32 kW	0.45 kW	1.2 kW
External Dimension		450×650×h900 mm	580×800×h1260 mm	670×900×h1450 mm
Material		Internal : Stainless-steel, External : Powder Coated steel		
Electrical Reqts.		1 Phase 230V, 50 / 60 Hz		3Phase 380V
Cat. No.	60Hz	DH.Chi0020	DH.Chi0030	DH.Chi0050
	50Hz	DH.Chi0025	DH.Chi0035	DH.Chi0055
Price, Each. ₩				

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

▶ Figure : One of the Applications in the Large Volume Evaporator Line.

DAIHAN® −35+150℃ Digital Precise Refrigerated/Heating Bath Circulator "MaXircu™ CL", ±0.2℃

With Flat Lid, Digital Fuzzy Control, CFC-free, Certi. & Traceability, 8 · 12 · 22 · 30 Lit, Flow 25Lit/min, Lift 4m

Ideal for Cooling/Heating Line of Facility, External/Internal Circulating Connect - od.12 & id.10mm, **정밀 냉동/가열 배스 겸용 써큘레이터**

−35℃ ~ +150℃ Refrigerated / Heating Bath Circulator

※ See page 37 for the Cooling/Heating Transfer Fluid & Circulation Hose ;

▶ Therminol D12® −85+230℃ Cooling/Heating Transfer Fluid

▶ SYN THERM 22L® −5+320℃ Heating Transfer Fluid

▶ Insulated External Circulating Tubing

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

※ See the "Bath Circulator" Section for the Details

■ *Made in Korea* ■ *CE Certified* ■ *PL (Product Liability) Insurance*

Specifications & Ordering information

Spec. \ Model		MaXircu™ CL-8 Max. Capa. 8 Lit	MaXircu™ CL-12 Max. Capa. 12 Lit	MaXircu™ CL-22 Max. Capa. 22 Lit	MaXircu™ CL-30 Max. Capa. 30 Lit
Temp. Range & Accuracy		−35℃~ +150℃, ±0.1℃			
Temp. Resolution		0.1℃-Display, 0.1℃-Control			
Temp. Uniformity & Probe		±0.2℃ at −20℃, PT100			
Pump		Max Flow Rate : 25Lit/min(Controlled 5 Steps Flow Rate Speed), Max Pressure : 7.5 psi, Max Lift : 4m			
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Heating Power		1 kW	1.5 kW	2 kW	2.2 kW
Refrigerator		1/2HP	1/2HP	7/8HP	1HP
Cooling Capacity	at +20℃	500 W	530 W	860 W	1030 W
	at 0℃	340 W	370 W	620 W	760 W
	at −20℃	200 W	210 W	400 W	500 W
Refrigerant		CFC -Free(R-404A) Refrigeration System			
Total Power Consumption		1.7 kW	2.2 kW	3 kW	3.3 kW
Compressor Control		Intelligent Control of Refrigerator for preventing Compressor Overload			
External Circulation Nozzle		id.10.5 / od.12.5mm(For Inner Circulat. : to Connect directly the in-/outlet Nozzles)			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog-Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker			
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 40 mm Thickness Urethane Foaming - Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid			
Dimension (w×d×h)	Effective Space (mm)	175×153×150	230×181×150	290×220×200	330×290×200
	Internal (mm)	175×320×150	230×350×150	290×390×200	330×460×200
	External (mm)	400×523×807	400×523×807	483×563×850	494×633×906
Packing Size (mm) & Gross Weight (kg)		530×630×985	530×630×985	615×670×1025	630×740×1075
		50 kg	55 kg	65 kg	78 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCL00408	DH.WCL00412	DH.WCL00422	DH.WCL00430
	120V	DH.WCL00508	DH.WCL00512	DH.WCL00522	DH.WCL00530
Price, Each. ₩					

* Other Specifications are available upon Customer's Request.

※ **운임 약 ₩ 16,000 별도!**

DAIHAN® Multiuse Water Jet Vacuum Pump/Aspirator "WEV", 0.098MPa/20mbar

Ideal for Evaporator 1~50 Lit, with Multi-Taps/Safety Valve, Bath 15 & 57 Lit, **다용도 아스피레이터, 워터젯 진공펌프**

(1) "WEV-003S" ideal for 1~5Lit Evaporator

(2) "WEV-0095" ideal for 5~50Lit Evaporator

■ *Resist Corrosion by Acid, Alkali and Solvents.* ■ *Cyclically use Water*

■ *Good for Evaporation, Distillation, Crystallization, Drying, Sublimation, Filtration &c.*

■ *Fluorine Rubber Sealing* ■ *Need to Replace the Water in the Flume Regularly*

* Can be used alone or in Parallel - WEV-003S(2 Tap & 2-Display), WEV-0095(5 Tap)
* Stainless-steel(#304) Body, Copper Ejector, Tee Junction, PP Back Valve, STS Impeller(WEV-0095)

Spec. \ Model	(1) "WEV-003S" Ideal for 1~5Lit Evaporator	(2) "WEV-0095" Ideal for 5~50Lit Evaporator
Max. Vacuum Degree	0.098 Mpa (20mbar)	
Pump Power & Water Bath Volume	180W & 15Lit	550W & 57Lit
Flow Rate	80 Lit/min	100 Lit/min
Taps & Air Sucking Amount	2 Tap, 10 Lit/min (1 Tap)	5 Tap, 10 Lit/min (1 Tap)
External Circulation Nozzle	id. 5/od. 10mm (id. 8/od.11 mm Silicon tube Connected for Circulation)	
Safety Function	Safety Check Valve	
Drain Pipe	id. 15mm	id. 24.3mm
Material of Water Tank / Body	PP / PP	PE / Stainless-steel(#304)
Dimension & Net Weight	385×280×h420 mm / 11 kg	450×350×h820 mm / 36 kg
Electric Reqts.	230V, 50/60Hz	
Cat. No.	DH.WEV0003S	DH.WEV0095
Price, Each. ₩		

DAIHAN Scientific

Freeze Dry System "UniFreez™ FD"

Lab Scale Bench-top
Freeze Dryer

- Patented Jog-Dial & Touch-Button Control
- Compact-size Lab Scale Bench-top Type
- Fastest Freezing Time

Ergonomic & Compact Body

- Lab Scale, Bench-top Type Model
- Compact size for all laboratory table
- Ergonomic Design

Company	DAIHAN	Competitor
Chamber Capacity	8 Lit	8 Lit
External Dimension (mm)	w400×d530×h415	w500×d646×h976

Various Installing Accessory

- Used with 12-port Manifold or 8-port Dry Chamber, Various Size Flasks, Flask Top, Vacuum Valve, Vacuum Pumps, Table Cart etc.

12-port T-type Manifold

8-port Acrylic Dry Chamber

Intuitive User Interface

- Patented Jog-Dial Controller(Turn and Push)
- Capacitive Touch Button for user convenience
- Precise control by microprocessor
- Digital Back-Light LCD

16Lit Chamber Coming Soon!

Fastest Freezing System

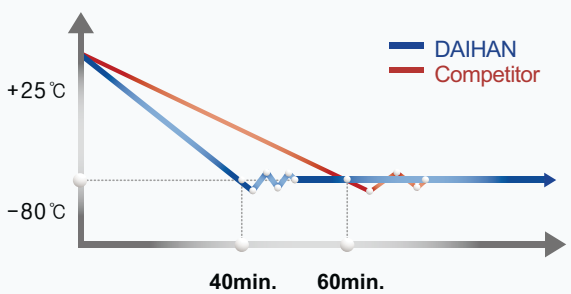
- DAIHAN Freezing System realizes Quick Freezing and Quick Defrosting Function

Freezing System

Others

- High Sublimation Rate : 3 & 6 Lit/24hr
- Manual Defrost Function : Hot Gas Defrost Function for quick next cycle turn-around
- Automatic or Manual Process Control
- Controllable temperature, vacuum and timer at Automatic Mode
- LED Indication Light On in case of suitable temperature and vacuum
- Can be Used with Various Accessories

Freezing speed comparison with Competing Product



DAIHAN® Freeze Dry System Lab Scale Benchtop-type "UniFreez™ FD", 3 · 6Lit/day, −90℃

With Automatic & Manual Process, Used with 12-port T-type Manifold or 8-port Acrylic Drying Chamber, 실험실용 동결 건조기

3Lit/day "FD-8" Freeze Dryer, with Optional 12-port T-type Manifold and 12 Vacuum Handle Valve

- ■ ***Made in Korea*** ■ ***Patented Jog-Dial & Touch Button Control System***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*** ■ ***PL (Product Liability) Insurance***
- ■ ***Ideal for Wide Range from Pharmaceutics, Biology, Food Industry to Petro-Chemistry and Semiconductor Industry, etc.***
- ∗ Ergonomic Design and Compact Body Size for All Laboratory Tables
- ∗ Allows Automatic or Manual Process Control
- ∗ LCD Indicates Temperature and Vacuum
- ∗ Rapid Integrated Hot Gas Defrost Function for Quick Next Cycle Turn-around
- ∗ LED Indication Light On in Case of Suitable Temperature and Vacuum
- ∗ Can be Controlled Temperature and Timer at Automatic Mode
- ∗ Homogeneous Temperature Distribution across all Shelves in Dry Chamber

Specifications & Ordering information

Spec. \ Model		"UniFreez™ FD-8"	Coming Soon "UniFreez™ FD-16"
Sublimation Rate(Lit / day)		3Lit / day	6Lit / day
Chamber & Max Condenser Capa.		Chamber : 8 Lit, Condenser : 10 Lit	Chamber : 16 Lit, Condenser : 20 Lit
Set Temperature Range		-90 ~ -60℃	
Compressor & Defrost-type		1/2 HP, Manual	3/4 HP, Manual
Display		Digital LCD with Back-Light Function	
Material		Stainless-steel(SUS304)	
Dimension(w×d×h) & Weight		Exterior : 450×594×h480 mm, Condenser : Φ300×h150 mm, Net Weight : 55 kg	Exterior : 500×620×h600 mm, Condenser : Φ300×h300 mm, Net Weight : 60 kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.Frd00208	DH.Frd00216
	120V	DH.Frd00108	DH.Frd00116
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

Optional Accessory for Freeze Dryer

(1) 12-port T-type Manifold

(2) 8-port Acrylic Dry Chamber

(3) 3-stage Shelf, Stainless-steel

(4) Vacuum Handle Valve

Tube Adapter for Connecting Flask Top

(8) Flask Top, Silicone

(9) Glass Flask

(10) Vacuum Pump

(11) 2-stage Table Cart

Optional 12-port T-type Manifold / 8-port Acrylic Dry Chamber / 3-stage Shelf

		Ea.	Price, ₩
DH.Frd01034	(1) T-type Manifold, 12-port, for Connecting 3/4″ Vacuum Handle Valve, with Silicon Stopper		
DH.Frd02010	(2) Acrylic Dry Chamber, 8-port, for Connecting 3/4″ Vacuum Handle Valve, with Silicon Stopper		
DH.Frd02020	(3) 3-stage Shelf, Stainless-steel(STS), for Acrylic Dry Chamber		

Optional Vacuum Handle Valve-/Tube Adapters-for Connecting Flask

		Ea.	Price, ₩
DH.Frd03010	(4) 3/4″ Vacuum Handle Valve, Neoprene Rubber & PP, for Connecting Flask		
DH.GL28091	(5) 3/4″ Glass Tube Adapter, Φ19/1.8t×L80mm for Connecting Middle & Large-size Flask Top		
DH.GL28092	(6) 3/4″ Glass Bend-type Tube Adapter, Φ19/1.8t×L80mm, for Connecting Middle & Large-size Flask Top		
DH.Frd04010	(7) 3/4″ PP Tube Adapter, Φ19/1.8t×L80mm, for Connecting Small-size Flask Top		

Optional DURAN® Borosilicate α 3.3 Glass Flasks / Silicone Flask Top

		Ea.	Price, ₩
DH.Frd05010	(8) Flask Top, Silicone, 3/4″ Small-size Flask Top, for 40-/80-ml Flask		
DH.Frd05020	, 3/4″ Middle-size Flask Top, for 200-/300-ml Flask		
DH.Frd05030	, 3/4″ Large-size Flask Top, for 500-/700-/1000-ml Flask		
DH.GL12041	(9) Glass Flask, DURAN® Glass α 3.3, 40ml , Φ40/2.3t×h80mm		
DH.GL12042	, 80ml , Φ40/2.3t×h120mm		
DH.GL12043	, 200ml , Φ65/2.2t×h100mm		
DH.GL12044	, 300ml , Φ65/2.2t×h140mm		
DH.GL12045	, 500ml , Φ90/2.5t×h125mm		
DH.GL12046	, 700ml , Φ90/2.5t×h165mm		
DH.GL12047	, 1000ml, Φ90/2.5t×h225mm		

Optional Vacuum Pumps / 2-stage Table Cart for Vacuum Pump

		Ea.	Price, ₩
V3.VOP100.FRD	(10) Vacuum Pump, **"VOP-100"**, 100/120Lit./min, NW25, 220V		
V3.VOP150.FRD	, **"VOP-150"**, 150/180Lit./min, NW25, 220V		
DH.Frd06025	NW25 Vacuum Pump Connection-set, Tube / O-ring / Clamp		
DH.Frd06016	NW16 Vacuum Pump Connection-set, Tube / O-ring / Clamp / Adapter		
DH.Ca1002	(11) 2-stage Table Cart for Freeze Dryer & Vacuum Pump, with Stop-on Caster and Vacuum Pump Oil Tray, w504×d604×h780mm		

DAIHAN Scientific

Fume Hood

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Ductless - Clean Bench, Laminar Flow ····· P. 65~66
Ducted - Premium Fume Hood ····· P. 67
- PP Fume Hood ····· P. 68
- PP & PVC Wet Scrubber Fume Hood ····· P. 69

Ductless Clean Bench, Laminar Flow
"MaXtream™ V12"

Ducted Premium Fume Hood
"HD-1500G"

Ducted PP Fume Hood
"HD-1500"

Ducted PP & PVC Wet Scrubber Fume Hood
"HD-1500S"

Fume Hood, Clean Bench-Ductless

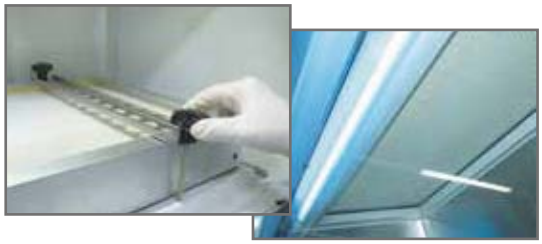
Maximum Convenience by Advanced Digital Technology

DAIHAN Hi-performance Fume Hood, Laminar Flow Clean Bench MaXtream™

The Laminar Flow Clean Bench from DAIHAN Scientific provides reliable protection for samples and work processes against particulate contamination.
The air from above the cabinet vertically goes through a **Pre-filter and a Class 100 HEPA Filter** of efficiency up to 99.97% & 0.3 micron size and is exhausted to the front opening for maintenance of Contamination-Free in the cabinet. Also **UV Lamp** installed in the cabinet contributes to sterilize a source of contamination.

The Controller, fully optimized for convenience in the practical use of Clean Bench, offers intuitive monitoring and easy controlling of UV Lamp, Fluorescent light, Filter Fan and air flow speed.

Added to the Unique User Convenient features of DAIHAN, Laminar Flow & Cleanliness, the core performance of Laminar Flow Clean Bench is innovated to be a new Design. Experiencing the **Max Convenience** and Cleanliness, **MaXtream™** Clean Bench is necessary to have but no more.



Key Features

- Design with the consideration of Safety, Convenience and Functionality
- Class 100 HEPA Filter with Pre-filter & Vertical Air Flow : Efficiency up to 99.97% Filtration for 0.3 micron sized particle
- Easy to change HEPA filter design, even without servicing.
- Tempered Glass with Sash Door & Double Door Closing Detection
  : Perfect Safety against UV (Automatic turn-off of UV lamp when door opens)
- 8 Step Control of Air Flow Speed and Timer function
- 2 × Internal Electrical Outlet, 2 × Valve for External Gas Connection, Fluorescent Lamp

Class 100 HEPA Filter

Efficiency up to 99.97% filtration for 0.3 micron sized particle.
Easy to change HEPA filter design, even without servicing.

UV Lamp

Built-in UV Lamp Contributes to sterilize a source of contamination in the cabinet.
Automatic turn-off of Fluorescent lamps while UV lamps on: Prevention from an accident (damage on samples or a burn) by performing experiment while UV lamps on.

Convenience to operate

2 × Internal Electrical Outlet for other electrical devices connection (220 Voltage)

2 × Valve for External Gas Connection.

Capacitive Touch-Button Controller

Intuitive Touch-Button Controller for user convenience.
Precise Control by Microprocessor and 8 Step Control of Air Flow Speed by simple Touch. Timer for UV Lamp operation.

Various Product Size

Various Sized Laminar Flow Clean Bench : 1200-/1500-/1800mm

DAIHAN® Vertical Clean Bench / Filtered PCR Cabinet "MaXtream™ V", Class 100 HEPA filter

With 8 Steps Air Velocity Control, Touch-type Controller, Dual UV Lamp and Florescent Lamp, Air and Gas Cock, Built-in Electrical Outlet

크린벤치 & PCR케비넷, 수직 기류형, 터치식 컨트롤러, 8 단계 풍속 조절, UV 프로텍션 시스템

Vertical Clean Bench and Filtered PCR Cabinet "MaXtream™ V12"

Vertical Air Flow of *"MaXtream™ V" model*

High-performance Digital Touch-type Controller, Easy to Use

- ***Made in Korea*** ■ ***CE Certified***
- ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Class 100 HEPA Filter of efficiency up to 99.97% & 0.3 micron size***
- ***Mesh Guard for HEPA Filter Protection***
- ***Easy to Exchange HEPA Filter***
- ***8 Steps Air Velocity Control***
- ***Safety UV Protection System : UV Lamp is only activated once safety Glass Door is Completely closed***
- ***High performance of Touch Controller-Easy to use***
- ***Microprocessor Digital Controller and Back Light LCD***
- ***UV and Fluorescent Lamp, External Gas Connection Valve, Internal Electrical outlet***
- ∗ High-Quality Back-Light LCD
- ∗ 99hr 59min Timer
- ∗ Silence and Vibration-Free Blower
- ∗ Tempered Safety Glass Sliding Door for Protection from Against UV
- ∗ Optimized Air Flow System for Uniform Air Flow/Velocity
- ∗ Corrosion Resistant 304 Stainless-steel Working table
- ∗ Air Flow-type : Vertical Air Flow-type

Specifications & Ordering information

Spec. \ Model		"MaXtream™ V12" Length. 1200	"MaXtream™ V15" Length. 1500	"MaXtream™ V18" Length. 1800
Air Flow-type		Vertical Air Flow-type		
Dimension (w×d×h)(mm)	Interior	1,200×660×610	1,500×660×610	1,800×660×610
	Exterior	1,280×735×1,895	1,580×735×1,895	1,880×735×1,895
Air Volume		1,350 m³/h	1,700 m³/h	2,020 m³/h
Air Flow Velocity		8 Steps, 0.3 ~ 0.6 m/s		
HEPA Filter		Class 100, 0.3㎛ Particle Removal 99.97%		
Prefilter		3~30㎛ Particle Removal		
Display		Back Light LCD		
Controller		Microprocessor Digital Controller with Touch UI		
Lamp		1×UV 20W, 1×FL 36W	1×UV 30W, 1×FL 55W	
Noise Level		Under 65dBA		
Door Type		Tempered Safety Glass Sliding Door		
Utility Device		1×Air Cock, 1×Gas Cock, 2×220V Outlet		
Material		Internal : Stainless-steel(# 304), External : Powder Coated steel		
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No.	230V	DH.WLCV1200	DH.WLCV1500	DH.WLCV1800
	120V	DH.WLCV1201	DH.WLCV1501	DH.WLCV1801
Price, Each. ₩				

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 95,000 별도!

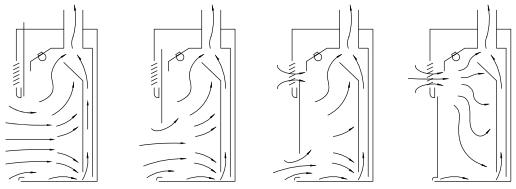
DAIHAN® Premium Ducted Fume Hood, (A) Bypass or (B) Air Curtain-Type, 1200 · 1500 · 1800 · 2400 mm

With Phenol Work Top, Phenol Plate Interior, Air-/Gas-/Water-Cock, Cup Sink, Drain, and Explosion Proof Lamp

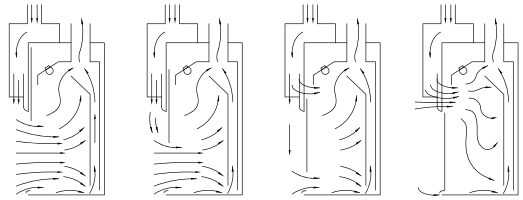
닥트형 흄후드, Phenol 재질의 작업대, 우수한 내습/내구성, 일반 배기형 or 에어커튼형의 선택성

Premium Ducted Fume Hood "HD-1500G"

Diagram of Air Flow Depending on the Safety Window Opening



(A) By-Pass Air Flow-type



(B) Air Curtain Air Flow-type

Welcome! Custom-Made Fume Hood!!

We can Offer DAIHAN Custom Fume Hood, for which you can Specify the Specification

Selectable Material of Custom-Made Fume Hood

	Material			
Exterior	Steel	Stainless	P.P	
Interior	Penol	Stainless	P.E	
Work Top	Penol	Stainless	P.E	Granite

- ***Made in Korea***
- ***Durable, Hazardous Chemical Gas Remove.***
- ***Slide Type Sash Door with Tempered Safety Glass.***
- ***Sash-type Tempered Safety Glass Window.***

∗ General Chemical Gas Hood with High Thermal, Chemical Resistance, Various Material for User selection.
∗ With Air-/Gas-/Water-Cock, Cup Sink, Drain, Explosion Proof Lamp, Receptacle, Multi-purpose Cabinet.
∗ **By Pass Air Flow-type :** After the Suction Forcing the Indoor Air to Discharge the Gas to the Outside
∗ **Air Curtain Air Flow-type :** The Outdoor Air Sucked Form the Air Curtain to the Front Chamber, and the Exhaust Gas Back to Suction the Air
∗ Discharging the Polluted Air and Toxic Gas Generated during the Experiment in a Laboratory to the Outside through the Duct Structure
∗ Process Pipe & Duct Silicon Sealing to Completely Block the Gas Leakage to the Outside
∗ The Mechanical Design is Manufactured with Superior Workability

Specification

Models & Air Flow-type	**(A) By-Pass Air Flow-type**			
	"HD-1200G"	**"HD-1500G"**	**"HD-1800G"**	**"HD-2400G"**
	(B) Air Curtain Air Flow-type			
	"HD-C1200G"	**"HD-C1500G"**	**"HD-C1800G"**	**"HD-C2400G"**
Duct Size	Φ 200mm	Φ 250mm		
Material*	**(1)** External : Powder Coated Steel, **(3)** Internal : Phenol Plate, **(4)** Work Top : Phenol Plate			
Sash Frame & Window	PVC Sheet Frame, **(2)** Tempered Safety Glass Sash Window			
Cabinet	**(5)** Built in Multi-purpose Cabinet			
Lamp	LED Lamp(1ea × 20 W)			
Cock	1ea × Air-/Gas-/Water-Cock			
Receptacle	2ea 220V Concent or 2ea 110V Concent			
Dimension (w × d × h) (mm)	1200 × 800 × 2350	1500 × 800 × 2350	1800 × 800 × 2350	2400 × 800 × 2350
Power Supply *	1 Phase, AC 220V / 60Hz			

∗ Other Specifications(50Hz) are available upon Customer's Request.

Ordering Information

(A) By-Pass Air Flow-type Ducted Fume Hood

		Ea. Price, ₩
DH.WHD02312	Fume Hood, **230V,** 1200 × 800 × h2350mm, **"HD-1200G"**	
DH.WHD02315	, 1500 × 800 × h2350mm, **"HD-1500G"**	
DH.WHD02318	, 1800 × 800 × h2350mm, **"HD-1800G"**	
DH.WHD02324	, 2400 × 800 × h2350mm, **"HD-2400G"**	
DH.WHD01312	Fume Hood, **120V,** 1200 × 800 × h2350mm, **"HD-1200G"**	
DH.WHD01315	, 1500 × 800 × h2350mm, **"HD-1500G"**	
DH.WHD01318	, 1800 × 800 × h2350mm, **"HD-1800G"**	
DH.WHD01324	, 2400 × 800 × h2350mm, **"HD-2400G"**	

(B) Air Curtain Air Flow-type Ducted Fume Hood

		Ea. Price, ₩
DH.WHD02412	Fume Hood, **230V,** 1200 × 800 × h2350mm, **"HD-C1200G"**	
DH.WHD02415	, 1500 × 800 × h2350mm, **"HD-C1500G"**	
DH.WHD02418	, 1800 × 800 × h2350mm, **"HD-C1800G"**	
DH.WHD02424	, 2400 × 800 × h2350mm, **"HD-C2400G"**	
DH.WHD01412	Fume Hood, **120V,** 1200 × 800 × h2350mm, **"HD-C1200G"**	
DH.WHD01415	, 1500 × 800 × h2350mm, **"HD-C1500G"**	
DH.WHD01418	, 1800 × 800 × h2350mm, **"HD-C1800G"**	
DH.WHD01424	, 2400 × 800 × h2350mm, **"HD-C2400G"**	

Optional Blower

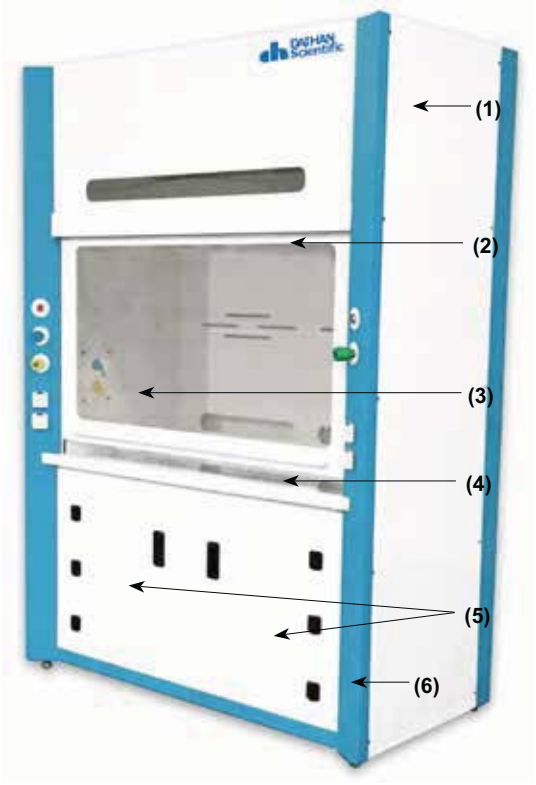
		Ea. Price, ₩
DH.WHD10020	Integrated Blower, **"HDBL0020"**	
DH.WHD10021	External Blower, **"HDBL0021"**	

※ Custom-Made Fume Hood : Wide Variety of Material for User Selection.
※ Note! Freight and Installation Charges Separately.

DAIHAN® Ducted PP Fume Hood for Acid / Chemical Resistance, 1200 · 1500 · 1800 · 2400 mm

(A) Bypass or (B) Air Curtain-Type, with Air-/Gas-/Water-Cock, Cup Sink, Drain, and Explosion Proof Lamp

내산 / 내약품용 닥트형 PP 흄후드, PP 재질의 외부/내부/작업대, 일반 배기형 or 에어커튼형의 선택성



Ducted PP Fume Hood "HD-1500"

■ Made in Korea ***■ Durable, Hazardous Chemical Gas Remove.***

■ PP(Polypropylene) Material for Excellent Resistance to Acid / Alkali / Chemicals / High Temp.

∗ With Air-/Gas-/Water-Cock, Cup Sink, Drain, Explosion Proof Lamp, Receptacle, and Multi-purpose Cabinet.

∗ **By Pass Air Flow-type :** After the Suction Forcing the Indoor Air to Discharge the Gas to the Outside

∗ **Air Curtain Air Flow-type :** The Outdoor Air Sucked Form the Air Curtain to the Front Chamber, and the Exhaust Gas Back to Suction the Air

∗ Discharging the Polluted Air and Toxic Gas Generated during the Experiment in a Laboratory to the Outside through the Duct Structure

∗ Process Pipe & Duct Silicon Sealing to Completely Block the Gas Leakage to the Outside

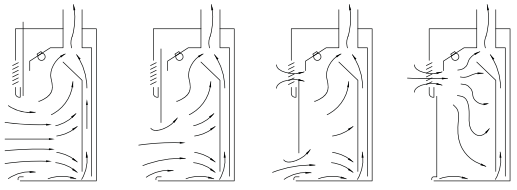
∗ The Mechanical Design is Manufactured with Superior Workability

Specification

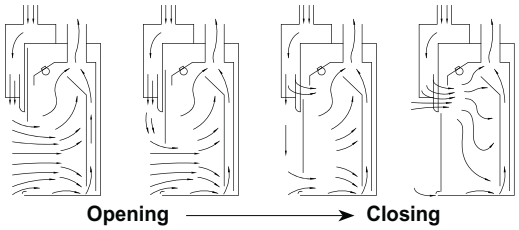
Models & Air Flow-type	(A) By-Pass Air Flow-type			
	"HD-1200"	"HD-1500"	"HD-1800"	"HD-2400"
	(B) Air Curtain Air Flow-type			
	"HD-C1200"	"HD-C1500"	"HD-C1800"	"HD-C2400"
Duct Size	Φ 200mm	Φ 250mm		
Material*	**(1)** External · **(3)** Internal · **(4)** Work Top : PP **(6)** Column · **(2)** Sash Frame & Window : PVC			
Cabinet	**(5)** Built-in Multi-purpose PP Cabinet			
Lamp	LED Lamp(1ea×20 W)			
Cock	1ea×Air-/Gas-/Water-Cock			
Receptacle	4ea 220V Concent or 4ea 110V Concent			
Dimension (w×d×h) (mm)	1200×800×2200	1500×800×2200	1800×800×2200	2400×800×2200
Power Supply *	1 Phase, AC 220V / 60Hz			

*** Other Specifications(50Hz) are available upon Customer's Request.**

Diagram of Air Flow Depending on the Safety Window Opening



(A) By-Pass Air Flow-type



(B) Air Curtain Air Flow-type

Welcome! Custom-Made Fume Hood!!

We can Offer DAIHAN Custom Fume Hood, for which you can Specify the Specification

Selectable Material of Custom-Made Fume Hood

	Material			
Exterior	PVC	P.P	ABS	
Interior	PVC	P.P	P.E	ABS
Work Top	PVC	P.P	P.E	ABS

Ordering Information

(A) By-Pass Air Flow-type Ducted PP Fume Hood

		Ea. Price, ₩
DH.WHD02112	Fume Hood, **230V,** 1200×800×h2200mm, **"HD-1200"**	
DH.WHD02115	, 1500×800×h2200mm, **"HD-1500"**	
DH.WHD02118	, 1800×800×h2200mm, **"HD-1800"**	
DH.WHD02124	, 2400×800×h2200mm, **"HD-2400"**	
DH.WHD01112	Fume Hood, **120V,** 1200×800×h2200mm, **"HD-1200"**	
DH.WHD01115	, 1500×800×h2200mm, **"HD-1500"**	
DH.WHD01118	, 1800×800×h2200mm, **"HD-1800"**	
DH.WHD01124	, 2400×800×h2200mm, **"HD-2400"**	

(B) Air Curtain Air Flow-type Ducted PP Fume Hood

		Ea. Price, ₩
DH.WHD02212	Fume Hood, **230V,** 1200×800×h2200mm, **"HD-C1200"**	
DH.WHD02215	, 1500×800×h2200mm, **"HD-C1500"**	
DH.WHD02218	, 1800×800×h2200mm, **"HD-C1800"**	
DH.WHD02224	, 2400×800×h2200mm, **"HD-C2400"**	
DH.WHD01212	Fume Hood, **120V,** 1200×800×h2200mm, **"HD-C1200"**	
DH.WHD01215	, 1500×800×h2200mm, **"HD-C1500"**	
DH.WHD01218	, 1800×800×h2200mm, **"HD-C1800"**	
DH.WHD01224	, 2400×800×h2200mm, **"HD-C2400"**	

Optional Blower

		Ea. Price, ₩
DH.WHD10010	Integrated Blower, **"HDBL0010"**	
DH.WHD10011	External Blower, **"HDBL0011"**	

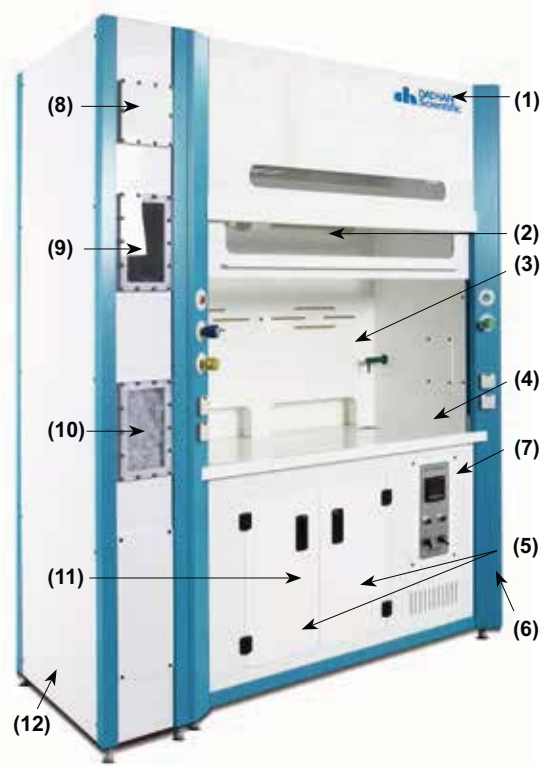
※ Custom-Made Fume Hood : Wide Variety of Material for User Selection.

※ Note! Freight and Installation Charges Separately.

DAIHAN® Ducted PP & PVC Wet Scrubber Fume Hood for Acid/Chemical Resistance, 1500 · 1800 · 2100 · 2400 mm

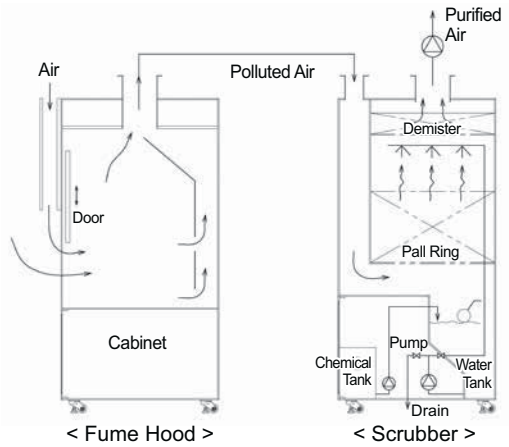
(A) Bypass or (B) Air Curtain-Type, Circulation Pump, PP Pall Ring Filter, Demister, Air-/Gas-/Water-Cock, Cup Sink, and Drain

내산/내약품용 닥트형 PP & PVC 스크러버 흄후드, PP 재질의 외부/내부/작업대, PVC 재질의 스크러버, 내화학성, 대기오염방지형



Ducted PP & PVC Wet Scrubber Hood "HD-1500S"

Diagram of Air Flow Depending on the Safety Window Opening



(B) Air Curtain Type
Ducted PP & PVC Wet Scrubber Hood - Air Flow

Welcome! Custom-Made Fume Hood!!

We can Offer DAIHAN Custom Fume Hood, for which you can Specify the Specification

Selectable Material of Custom-Made Fume Hood

	Material			
Exterior	PVC	P.P	ABS	
Interior	PVC	P.P	P.E	ABS
Work Top	PVC	P.P	P.E	ABS

■ Made in Korea ***■ Durable, Hazardous Chemical Gas Remove.***

■ PP(Polypropylene) Material for Excellent Resistance to Acid / Alkali / Chemicals / High Temp.

* with Air-/Gas-/Water-Cock, Cup Sink, Drain, Explosion Proof Lamp, Receptacle, Multi-purpose Cabinet.
* Built-in Wet Scrubber : with Circulation Pump, Water Level Gauge, Water Storage Tank, PP Pall-ring Filter, Demister, Water Spray Nozzle, pH Indicator/Control Panel
* **By Pass Air Flow-type :** After the Suction Forcing the Indoor Air to Discharge the Gas to the Outside
* **Air Curtain Air Flow-type :** The Outdoor Air Sucked Form the Air Curtain to the Front Chamber, and the Exhaust Gas Back to Suction the Air
* Moving the Experiment Polluted Air and Toxic Gases Generated in the Laboratory of the Scrubber through Duct Structure, and only the Purified Air Discharged to the Atmosphere after the Contaminants have been Removed
* An Acidified Water drained to Neutralize
* Required Equipment for Air Pollution Prevention
* Through a pH Meter Display can Check the Current pH Level of the Water Storage Tank
* Process Pipe & Duct Silicon Sealing to Completely Block the Gas Leakage to the Outside
* The Mechanical Design is Manufactured with Superior Workability

Specification

Models & Air Flow-type	(A) By-Pass Air Flow-type			
	"HD-1500S"	"HD-1800S"	"HD-2100S"	"HD-2400S"
	(B) Air Curtain Air Flow-type			
	"HD-C1500S"	"HD-C1800S"	"HD-C2100S"	"HD-C2400S"
Duct Size	Φ 200mm	Φ 250mm		
Material*	**(1)** External · **(3)** Internal · **(4)** Work Top · **(7)** pH Indicator/Control Panel · **(8)** Demister · **(10)** Pall Ring : PP, **(2)** Sash Frame & Window · **(6)** Column · **(9)** Window · **(12)** Wet Scrubber : PVC			
Cabinet	**(5)** Built-in Multi-purpose PP Cabinet			
Lamp	Explosion Proof Lamp(1ea×20 W)			
Cock	1ea×Air-/Gas-/Water-Cock			
Receptacle	4ea 220V Concent or 4ea 110V Concent			
Circulation Pump	**(11)** Built in Magnetic Pump, 1 Phase, AC 220V, 1/3HP			
Water Level Gauge	Clear PVC			
Filter	**(10)** PP Pall Ring			
Demister	**(8)** PP Made (Mesh-type)			
Water Spray Nozzle	6mm PVC Nozzle			
Water Drain Line	PVC Pipe			
Dimension (w×d×h) (mm)	1500×800×2200	1800×800×2200	2100×800×2200	2400×800×2200
Power Supply *	1 Phase, AC 220V / 60Hz			

*** Other Specifications(50Hz) are available upon Customer's Request.**

Ordering Information

(A) By-Pass Air Flow-type, PP Wet Scrubber Fume Hood

		Ea. Price, ₩
DH.WHD02515	Fume Hood, **230V,** 1500×800×h2200mm, **"HD-1500S"**	
DH.WHD02518	, 1800×800×h2200mm, **"HD-1800S"**	
DH.WHD02521	, 2100×800×h2200mm, **"HD-2100S"**	
DH.WHD02524	, 2400×800×h2200mm, **"HD-2400S"**	

(B) Air Curtain Air Flow-type, PP Wet Scrubber Fume Hood

		Ea. Price, ₩
DH.WHD02615	Fume Hood, **230V,** 1500×800×h2200mm, **"HD-C1500S"**	
DH.WHD02618	, 1800×800×h2200mm, **"HD-C1800S"**	
DH.WHD02621	, 2100×800×h2200mm, **"HD-C2100S"**	
DH.WHD02624	, 2400×800×h2200mm, **"HD-C2400S"**	

Optional Blower

		Ea. Price, ₩
DH.WHD10011	External Blower, **"HDBL0011"**	

※ Custom-Made Fume Hood : Wide Variety of Material for User Selection.

※ Note! Freight and Installation Charges Separately.

DAIHAN Scientific

Furnace

Furnace, Muffle, 1000℃ ..... P. 71
, Muffle, 1200℃ ..... P. 72
, Muffle, High Temperature, 1450℃ ..... P. 73
, Muffle, High Temperature, 1650℃ ..... P. 74
, Tube, 1000℃ ..... P. 75

1000℃ Muffle Furnace, "FX-14"

1200℃ Muffle Furnace, "FHX-63"

1650℃ High-Temp Muffle Furnace, "FSK-2"

1000℃ Tube Furnace, "FT-860"

DAIHAN® 1,000℃ Programmable Digital Muffle Furnace "FX", Exposed Heating Elements-type

With Digital PID Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit

디지털 전기로, 디지털 PID 컨트롤 시스템, 4면 가열 방식, 히터 노출형

14Lit "FX-14" 1000℃ Model

63Lit "FX-63" 1000℃ Model

Inner Chamber of
Exposed Heating Elements-type

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***
- ***Digital PID Programmable Controller : 4 Patterns with 10 Segments***

∗ Designed for Ash-Determinations, Enameling, Fusions, Precipitate Drying
∗ User's Self-Compensation Function for Temperature (±50℃) ∗ Resolution : 1℃, 1min
∗ Safety Switch for Door Opening ∗ Ceramic Fiber exposed Heating Wire, 4-Side Heating

Specifications & Ordering information

Spec. \ Model		"FX-03" Max.Capa. 3 Lit	"FX-05" Max.Capa. 4.5 Lit	"FX-12" Max.Capa. 12 Lit	"FX-14" Max.Capa. 14 Lit	"FX-27" Max.Capa. 27 Lit	"FX-63" Max.Capa. 63 Lit
Temp. Range		300℃ ~ 1000℃					
Capacity		3 Lit	4.5 Lit	12 Lit	14 Lit	27 Lit.	63 Lit
Heater		Kanthal A1, Expose Wire Heating Elements, 4-Side Heating					
Thermocouple		K-type Thermocouple					
Heating Power		1.6 kW	1.7 kW	3.3 kW	4.0 kW	4.6 kW	9 kW
Required time to be reached 800℃		16 min		20 min			23 min
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end					
Display		Digital LCD with Back-Light Function					
Controller		Digital PID Controller with Jog-Dial Switch (Turn+Push)					
Program Function		4 Patterns with 10 Segments					
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection Safety Switch for Door Opening					
Material		Ceramic Fiber with Heating Wire-Internal, Powder Coated steel-External Ceramic Fiber-Insulation					
Dimension (w×d×h)	Internal (cm)	13×25×9	15×30×10	20×30×20	25×35×16	30×30×30	40×40×40
	External (cm)	41×48×53	44×53×55	50×55×66	55×59×62	60×59×76	100×75×95
Packing Size(w×d×h) (cm)		63×54×77	68×57×78	70×63×89	74×68×85	74×73×99	116×90×110
Gross Weight		47 kg	54 kg	59 kg	73 kg	83 kg	225 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			
Cat. No.	230V	DH.WF21.03	DH.WF21.05	DH.WF21.12	DH.WF21.14	DH.WF21.27	DH.WF21.63
	120V	DH.WF20.03	DH.WF20.05	DH.WF20.12	DH.WF20.14	DH.WF20.27	-
	3Phase	-	-	DH.WF23.12	DH.WF23.14	DH.WF23.27	DH.WF23.63
Price, Each. ₩							

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

Spare Ceramic Fiber Plate

		Ea. Price, ₩
DH.WF211.03	(1) Ceramic Fiber Plate, 120×215mm, **"FS1103"** for **3Lit**	
DH.WF211.05	, 140×265mm, **"FS1105"** for **4.5Lit**	
DH.WF211.12	, 190×265mm, **"FS1112"** for **12Lit**	
DH.WF211.14	, 240×310mm, **"FS1114"** for **14Lit**	
DH.WF211.27	, 280×280mm, **"FS1127"** for **27Lit**	
DH.WF211.63	, 400×400mm, **"FS1163"** for **63Lit**	

Optional Glove

		Ea. Price, ₩
K9.26592	(2) Glove, Heat Resistant, 800℃ , 1Pair, L330 mm	
AS1.7896.01	(3) , 1000℃, 1Pair, L450 mm	
AS1.7896.02	, L350 mm	

(1) Ceramic Fiber Plate
(Included)

(2) Heat-resistant Glove
(800℃)

(3) Heat-resistant Glove
(1000℃)

Articles	Cat. No	Description

DAIHAN® 1,200℃ Programmable Digital Muffle Furnace "FHX", Exposed Heating Elements-type

With Digital PID Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit

디지털 전기로, 디지털 PID 컨트롤 시스템, 4면 가열 방식, 히터 노출형

14Lit "FHX-14" 1200℃ Model

63Lit "FHX-63" 1200℃ Model

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Patented Jog-Dial Control System and Digital LCD with Back-Light Function***
- ***Digital PID Programmable Controller : 4 Patterns with 10 Segments***

∗ Digital Jog-Dial Control System ∗ Included Ceramic Fiber Plate
∗ Ceramic Fiber Exposed Heating Wire, 4-Side Heating ∗ Safety Switch for Door Opening
∗ User's Self-Compensation Function for Temperature (±50℃) ∗ Resolution : 1℃, 1min

Specifications & Ordering information

Spec. \ Model		"FHX-03" Max.Capa. 3 Lit	"FHX-05" Max.Capa. 4.5 Lit	"FHX-12" Max.Capa. 12 Lit	"FHX-14" Max.Capa. 14 Lit	"FHX-27" Max.Capa. 27 Lit	"FHX-63" Max.Capa. 63 Lit
Temp. Range		300℃ ~ 1200℃					
Capacity		3 Lit	4.5 Lit	12 Lit	14 Lit	27 Lit	63 Lit
Heater		Kanthal A1, Expose Wire Heating Elements, 4-Side Heating					
Thermocouple		K-type Thermocouple					
Heating Power		1.6 kW	1.7 kW	3.3 kW	4.0 kW	4.6 kW	9 kW
Required time to be reached 800℃		16 min		20 min			23 min
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end					
Display		Digital LCD with Back-Light Function					
Controller		Digital PID Controller with Jog-Dial Switch (Turn+Push)					
Program Function		4 Patterns with 10 Segments					
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection Safety Switch for Door Opening					
Material		Ceramic Fiber with Heating Wire-Internal, Powder Coated steel-External Ceramic Fiber-Insulation					
Dimension (w×d×h)	Internal (cm)	13×25×9	15×30×10	20×30×20	25×35×16	30×30×30	40×40×40
	External (cm)	41×48×53	44×53×55	50×55×66	55×59×62	60×59×76	100×75×95
Packing Size(w×d×h) (cm)		63×54×77	68×57×78	70×63×89	74×68×85	74×73×99	116×90×110
Gross Weight		47 kg	54 kg	59 kg	73 kg	83 kg	225 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			
Cat. No.	230V	DH.WFH22.03	DH.WFH22.05	DH.WFH22.12	DH.WFH22.14	DH.WFH22.27	DH.WFH22.63
	120V	DH.WFH20.03	DH.WFH20.05	DH.WFH20.12	DH.WFH20.14	DH.WFH20.27	-
	3Phase	-	-	DH.WFH23.12	DH.WFH23.14	DH.WFH23.27	DH.WFH23.63
Price, Each. ₩							

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

Inner Chamber of
Exposed Heating Elements-type

Spare Ceramic Fiber Plate

		Ea. Price, ₩
DH.WF211.03	(1) Ceramic Fiber Plate, 120×215mm, **"FS1103"** for **3Lit**	
DH.WF211.05	, 140×265mm, **"FS1105"** for **4.5Lit**	
DH.WF211.12	, 190×265mm, **"FS1112"** for **12Lit**	
DH.WF211.14	, 240×310mm, **"FS1114"** for **14Lit**	
DH.WF211.27	, 280×280mm, **"FS1127"** for **27Lit**	
DH.WF211.63	, 400×400mm, **"FS1163"** for **63Lit**	

Optional Glove

		Ea. Price, ₩
K9.26592	(2) Glove, Heat Resistant, 800℃ , 1Pair, L330 mm	
AS1.7896.01	(3) , 1000℃, 1Pair, L450 mm	
AS1.7896.02	, L350 mm	

(1) Ceramic Fiber Plate
(Included)

(2) Heat-resistant Glove
(800℃)

(3) Heat-resistant Glove
(1000℃)

"WiseTherm® FSC" 1,450℃ Programmable High-Temp Muffle Furnace, Exposed Heating Elements-type

With SIC Heater, Digital PID Control, Short Heat-up Time, 2-Side Heating, without Ceramic Fiber Plate, 1.9~22 Lit

고온 디지털 전기로, 디지털 PID 컨트롤 시스템, 2면 가열 방식

1.9Lit "FSC-2" 1450℃ Model

4.5/11/22-Lit "FSC-5", "FSC-11" & "FSC-22" 1450℃ Model

Inner Chamber of
Exposed Heating Elements-type

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital PID Programmable Controller : 2 Patterns with 10 Segments***
- ***Digital LCD Display*** ■ ***High Quality Insulation : Ceramic Fiber Board***
- ***SIC(Silicon Carbide) Heater***

∗ Safety Door Lock System
∗ Ceramic Fiber Exposed Heating Wire, 2-Side Heating
∗ Excluding Ceramic Fiber Plate
∗ Safety Switch for Door Opening

Specifications & Ordering information

Spec. \ Model		WiseTherm® FSC-2 Max. Capa. 1.9Lit	WiseTherm® FSC-5 Max. Capa. 4.5Lit	WiseTherm® FSC-11 Max. Capa. 11Lit	WiseTherm® FSC-22 Max. Capa. 22Lit
Temp. Range		500℃ ~ 1450℃			
Capacity		1.9 Lit	4.5 Lit	11 Lit	22 Lit
Heater		SIC Heater, 2-Side Heating			
Thermocouple		R-type Thermocouple			
Heating Power		2 kW	3.3 kW	7.7 kW	9.6 kW
Required time to be reached 800℃		30 min			
Timer & Alarm		99hr 59min or Continuous run			
Display		Digital LCD Display			
Controller		Digital PID Controller, UP35A, SCR Power Controller with Push Button			
Program Function		2 Patterns with 10 Segments			
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Safety Switch for Door Opening	Over-Temp./-Current protection, Sensor Error Detection		
Material		Ceramic Fiber board with SIC Heater-Internal, Powder Coated steel-External, Ceramic Fiber-Insulation			
Dimension (w×d×h)	Internal (mm)	120×130×120	150×200×150	200×270×200	250×350×250
	External (mm)	440×482×700	820×555×655	870×625×715	920×705×785
Packing Size(w×d×h) (cm)		680×540×940	1350×600×890	1400×770×950	1450×900×1100
Gross Weight		57 kg	70 kg	102 kg	132 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz, without Cord and Plug			
Cat. No.	230V	DH.FSC02002	DH.FSC02005	DH.FSC02011	DH.FSC02022
	120V	DH.FSC01002	DH.FSC01005	DH.FSC01011	DH.FSC01022
Price, Each. ₩					

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

Optional Ceramic Fiber Plate

		Ea. Price, ₩
DH.FSC2002	(1) Ceramic Fiber Plate, w110×d120mm, for **1.9Lit**	
DH.FSC2005	, w140×d180mm, for **4.5Lit**	
DH.FSC2011	, w190×d250mm, for **11Lit**	
DH.FSC2022	, w240×d330mm, for **22Lit**	

Optional Glove

		Ea. Price, ₩
K9.26592	(2) Glove, Heat Resistant, 800℃ , 1Pair, L330 mm	
AS1.7896.01	(3) , 1000℃, 1Pair, L450 mm	
AS1.7896.02	, L350 mm	

(1) Ceramic Fiber Plate (Included)

(2) Heat-resistant Glove (800℃)

(3) Heat-resistant Glove (1000℃)

"WiseTherm® FSK" 1,650℃ Programmable High-Temp Muffle Furnace, Exposed Heating Elements-type

With $MoSi_2$ Heater, Digital PID Control, Short Heat-up Time, 2-Side Heating, without Ceramic Fiber Plate, 1.9~11 Lit

고온 디지털 전기로, 디지털 PID 컨트롤 시스템, 2면 가열 방식

1.9Lit "FSK-2" 1650℃ Model

4.5&11Lit "FSK-5" & "FSK-11" 1650℃ Model

Inner Chamber of
Exposed Heating Elements-type

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital PID Programmable Controller : 2 Patterns with 10 Segments***
- ***Digital LCD Display*** ■ ***High Quality Insulation : Ceramic Fiber Board***

∗ Safety Door Lock System
∗ Ceramic Fiber Exposed Heating Wire, 2-Side Heating
∗ Excluding Ceramic Fiber Plate
∗ Safety Switch for Door Opening

Specifications & Ordering information

Spec. \ Model		WiseTherm® FSK-2 Max. Capa. 1.9 Lit	WiseTherm® FSK-5 Max. Capa. 4.5 Lit	WiseTherm® FSK-11 Max. Capa. 11 Lit
Temp. Range		600℃ ~ 1650℃		
Capacity		1.9 Lit	4.5 Lit	11 Lit
Heater		$MoSi_2$ Heater, 2-Side Heating		
Thermocouple		B-type Thermocouple		
Heating Power		1.3 kW	2.9 kW	6.6 kW
Required time to be reached 800℃		40 min		
Timer & Alarm		99hr 59min or Continuous run		
Display		Digital LCD Display		
Controller		Digital PID Controller, UP35A, SCR Power Controller with Push Button		
Program Function		2 Patterns with 10 Segments		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Safety Switch for Door Opening	Over-Temp./-Current protection, Sensor Error Detection	
Material		Ceramic Fiber board with MOSi2 Heater-Internal, Powder Coated steel-External, Ceramic Fiber-Insulation		
Dimension (w×d×h)	Internal (mm)	120×130×120	150×200×150	200×270×200
	External (mm)	440×482×700	900×600×695	980×670×765
Packing Size(w×d×h) (cm)		680×540×940	1430×640×930	1510×810×1000
Gross Weight		72 kg	150 kg	186 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz, without Cord and Plug		
Cat. No.	230V	DH.FSK02002	DH.FSK02005	DH.FSK02011
	120V	DH.FSK01002	DH.FSK01005	DH.FSK01011
Price, Each. ₩				

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

Optional Ceramic Fiber Plate

		Ea. Price, ₩
DH.FSK2002	(1) Ceramic Fiber Plate, w110×d120mm, for **1.9Lit**	
DH.FSK2005	, w140×d180mm, for **4.5Lit**	
DH.FSK2011	, w190×d250mm, for **11Lit**	

Optional Glove

		Ea. Price, ₩
K9.26592	(2) Glove, Heat Resistant, 800℃ , 1Pair, L330 mm	
AS1.7896.01	(3) , 1000℃, 1Pair, L450 mm	
AS1.7896.02	, L350 mm	

(1) Ceramic Fiber Plate (Included)

(2) Heat-resistant Glove (800℃)

(3) Heat-resistant Glove (1000℃)

DAIHAN® Programmable Tube Furnaces "FT-series", Embedded Heating Elements-type, 1000℃
With Digital PID Programmable Control, 1- or 3-Heating Zone, Φ3~Φ14cm Tubes, 1,000℃ 프로그램식 튜브 전기로

(1) Programmable Tube Furnace, 1 Heating Zone "FT-860"

Side Figure of "FT-860"

(a) Heat-resistant Glove (800℃)

(b) Heat-resistant Glove (1000℃)

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

* Digital PID Programmable Controller : 3 Patterns with 16 Segments
* Designed for Ash-Determinations, Horizontal Application, Protective Gas Atmosphere
* Available Order Various Size Tubes, Without Working Tube
* Programmable Timer : 99hr 59min
* Resolution : 1℃, 1min

Specifications & Ordering information

Model		"FT-series" 1- or 3-Heating Zone					
Temp. Range & Heater		300℃ ~ 1000℃, Kantal A1, Embedded Wire Heating Elements					
Thermocouple & Display		K-type Thermocouple, LED					
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection					
Material		Ceramic Fiber with Heating Wire-Internal, Powder Coated steel-External					
(1) 1Heatong Zone Model		"FT-830"	"FT-860"	"FT-1230"	"FT-1260"	"FT-1630"	"FT-1660"
Heating Zone		1×Heating Zone					
		Φ8×L30	Φ8×L60	Φ12×L30	Φ12×L60	Φ16×L30	Φ16×L60
Available Tube Size(cm)		Φ3~Φ6 cm		Φ7~Φ10 cm		Φ10~Φ14 cm	
Heating Power		1.8 kW	3.2 kW	2.2 kW	4.5 kW	3.2 kW	6.2 kW
Heat-up Time(to 800℃)		17 min	20 min	18 min	22 min	20 min	25 min
Dimension (w×d×h cm)		40×28×44	70×28×44	40×34×50	70×34×50	40×40×56	70×40×56
Controller		1× Programmable PID Controller : 3 Patterns 16 Segments					
Cat. No.	230V	DH.WFT12.0830	DH.WFT12.0860	DH.WFT12.1230	DH.WFT12.1260	DH.WFT12.1630	DH.WFT12.1660
	120V	DH.WFT11.0830	DH.WFT11.0860	DH.WFT11.1230	DH.WFT11.1260	DH.WFT11.1630	DH.WFT11.1660
Price, Each. ₩							

(2) 3Heatong Zone Model		"FT-3860"	"FT-31260"	"FT-31660"
Heating Zone		3×Heating Zone		
		Φ8×(3×L20cm)	Φ12×(3×L20cm)	Φ16×(3×L20cm)
Available Tube Size(cm)		Φ3~Φ6 cm	Φ7~Φ10 cm	Φ10~Φ14 cm
Heating Power		3.3 kW	4.8 kW	6.6 kW
Heat-up Time(to 800℃)		20 min	22 min	25 min
Dimension (w×d×h cm)		70×28×h44 cm	70×34×h50 cm	70×40×h56 cm
Controller		Independent 3× Programmable PID Controller : 3 Patterns 16 Segments		
Cat. No.	230V	DH.WFT12.860.3	DH.WFT12.1260.3	DH.WFT12.1660.3
	120V	DH.WFT11.860.3	DH.WFT11.1260.3	DH.WFT11.1660.3
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.
* Tubes Size & Other Specifications are available upon Customer's Request

※ 운임 약 ₩ 20,000 별도!

Optional Glove

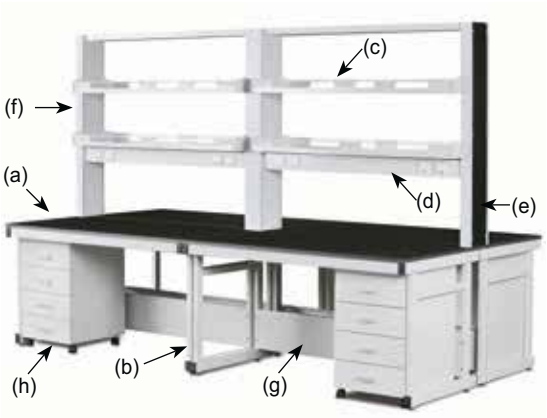
		Ea. Price, ₩
K9.26592	(a) Glove, Heat Resistant, 800℃ , 1Pair, L330 mm	
AS1.7896.01	(b) , 1000℃, 1Pair, L450 mm	
AS1.7896.02	, L350 mm	

DAIHAN® Laboratory Assembly Furniture, High Quality Steel-Frame/-Side Panel and Phenol Work Top, SUS Bolted Joint With Transfer Cabinet, Utility Box, 실험실용 조립식 실험대, 고품질 스틸 프레임, 내열성/내충격성/내화학성 페놀 상판, 볼트식 결합

- ***Made in Korea***
- ***Easy to Assemble with Stainless-steel(SUS 304) Bolts and Stable***
- ***Phenol Work Top : Good for Heat-/Shock-Resistant, Excellent Chemical-Resistant(Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.)***
- ***High Quality Steel-Frame(60×40 & 50×30mm), Side-/Back-Steel Panel(t1.6mm)***
- ***The Work Top are made of Melamine, Granite, Phenol(Color Choices Available : Black or Gray)***
- ***You can Choose the Materials of the Work Top according to Usage and Change the Height of Table.***

Features of Work Top Materials

∗ Phenol(Phenolic Laminate) : Excellent for Heat-/ Chemical-/ Shock-Resistance, Strong Plate Consist of Melamine-resin and Phenolic-resin, Surface Strengthening through Chemical and Chemical Treatment, Good for All Purpose Laboratory.
∗ Melamine : Good for Chemical and Heat-Resistance. The Surface is Resistant against Scratches and Abrasion. Suitable for Analytical Laboratory.
∗ Granite : Excellent for Heat and Shock-Resistance. Suitable for Special Laboratory like Instrumental Analysis Laboratory.



Structures and Features of Assembly Furniture

∗ (a) Phenol Work Top : Good for Heat-/Shock-Resistant Phenolic Laminate(t20mm), Excellent Chemical-Resistant (Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.), Color Choices Available : Black or Gray
∗ (b) Frame : The Most Stable Steel Under Construction, Suitable for Long-term Loading of Heavy Analysis Equipment, High Quality Steel, 60×40mm & 50×30mm
∗ (c) Shelves : Shelf Fall Prevention Design, Movable Up and Down, Aluminum Frame, PVC Shelf Plate(t8mm), Epoxy Powder Coating Steel Shelf Supporter(t1.6mm)
∗ (d) Utility Box : Electrical safety design, Attachment Emergency Breaker and Switch Box for Each Line, Steel Plate(t1.6mm), Cover type Power Outlet(220V)
∗ (e) Reagent Structure : Al Frame & Steel Plate(1.6mm), Columns bend(Edge Rounding) to Secure LAN Line, Electricity, Gas, Water etc., Maintenance and Safety Enhancement
∗ (f) Reagent Front / Rear Frame : Anodizing and Electro-deposition Treatment on Environmentally Friendly Aluminum Surface to Enhance Strength, Abrasion-Resistance, Corrosion-Resistance and Electrical insulation
∗ (g) Modular System Back Panel
  - Easily Removable and Easy to Follow and Check (Scalability)
  - Eco-friendly Epoxy Powder Coating to Prevent Scratches and Corrosion
  - Using Steel Plate t1.6mm
∗ (h) Transfer Cabinet : Particle Board Plate(t15/18mm) / Al-handle / Brake Caster / 450×500×h700mm, Basic 4-stage(2-/3-stage possible)
∗ Attach Inner Support : Use of Steel Pipe for Loaded Area and Flexural Reinforcement
∗ Sink Tables : We can Offer DAIHAN Custom Sink Table, for which you can Specify the Specification

※ Sequence of Assemble the Table

Package : Total 4 Box including Transfer Cabinet (Work Top / Frame / Panel / Transfer Cabinet)

1. Connect the Work Top Frame and Right Leg Frame with SUS Bolts using a Screwdriver

2. Connect the Work Top Frame and Left Leg Frame with SUS Bolts using a Screwdriver

3. Connect the Bottom Panel and the Left Leg Frame with SUS Bolts using a Screwdriver

4. Connect the Bottom Panel and the Right Leg Frame with SUS Bolts using a Screwdriver

5. Place the Work Top on the Completed Lower Frame

6. Finished Assembly

WFE401 Series, w1800mm

7. Place the Complete Assembly Transfer Cabinet in the desired location

DAIHAN® Laboratory Assembly Center Table, High Quality Steel-Frame/-Side Panel and Phenol Work Top, SUS Bolted Joint With Transfer Cabinet, Utility Box, 실험실용 조립식 중앙 실험대, 고품질 스틸 프레임, 내열성/내충격성/내화학성 페놀 상판, 볼트식 결합

■ ***Made in Korea*** ■ ***Easy to Assemble with Stainless-steel(SUS 304) Bolts and Stable***

■ ***Phenol Work Top : Good for Heat-/Shock-Resistant, Excellent Chemical-Resistant(Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.)***

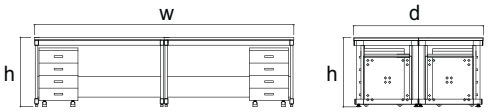
■ ***High Quality Steel-Frame(60×40 & 50×30mm), Side-/Back-Steel Panel(t1.6mm)***

∗ The Most Stable Steel Under Construction, Suitable for Long-term Loading of Heavy Analysis Equipment (60×40 & 50×30mm)
∗ Chemical-resistance Phenolic Laminate Work Top, t20mm (Color Choices Available : Black or Gray)
∗ Could be Change the Work Top, Height of Table on User Applications. Please Call to specify the Work Top.

(1) Assembly Basic Center Table, with Transfer Cabinet, Steel-Frame/-Side Panel & Phenol Work Top

∗ Work Top : Phenol Plate, t20mm ∗ Back Panel : Steel Plate, t1.6mm ∗ Frame : Steel, 60×40 & 50×30mm

WFE301 Series, w2400mm



		Ea.	Price, ₩
DH.WFE3011	Center Table, 1500×1500×h800mm, with Cabinet(2ea)		
DH.WFE3012	, 1800×1500×h800mm, with Cabinet(2ea)		
DH.WFE3013	, 2100×1500×h800mm, with Cabinet(4ea)		
DH.WFE3014	, 2400×1500×h800mm, with Cabinet(4ea)		
DH.WFE3015	, 3000×1500×h800mm, with Cabinet(4ea)		
DH.WFE3016	, 3600×1500×h800mm, with Cabinet(4ea)		

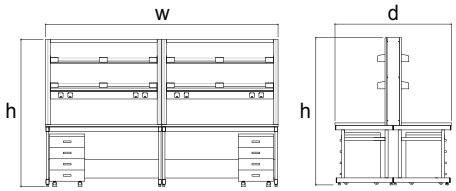
※ Assembly Details : See Page 76

※ **Note! Freight and Installation Charges Separately.**

(2) Assembly Shelf-type Center Table, with Transfer Cabinet/Shelves, Steel-Frame/-Side Panel & Phenol Work Top

∗ Work Top : Phenol Plate, t20mm ∗ Back Panel : Steel Plate, t1.6mm ∗ Frame : Steel, 60×40 & 50×30mm ∗ Size : d1500×h800/1900mm

WFE302 Series, w2400mm



		Ea.	Price, ₩
DH.WFE3021	Center Table, w1500×h800/1900mm, with Cabinet(2ea) / Shelves		
DH.WFE3022	, w1800×h800/1900mm, with Cabinet(2ea) / Shelves		
DH.WFE3023	, w2100×h800/1900mm, with Cabinet(4ea) / Shelves		
DH.WFE3024	, w2400×h800/1900mm, with Cabinet(4ea) / Shelves		
DH.WFE3025	, w3000×h800/1900mm, with Cabinet(4ea) / Shelves		
DH.WFE3026	, w3600×h800/1900mm, with Cabinet(4ea) / Shelves		

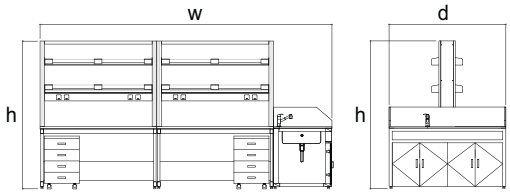
※ Assembly Details : See Page 76

※ **Note! Freight and Installation Charges Separately.**

(3) Assembly Comprehensive Center Table, with Cabinet/Sink Table/Shelves, Steel-Frame/-Side Panel & Phenol Work Top

∗ Work Top : Phenol Plate, t20mm ∗ Back Panel : Steel Plate, t1.6mm ∗ Frame : Steel, 60×40 & 50×30mm ∗ Size : d1500×h800/1900mm
∗ Sink Top : Phenol Plate, t20mm ∗ Water Guard : 3-sided Tempered Glass ∗ with Cabinet(4ea) / Shelves / Sink Table ∗ Sink Bowl : PP(Polypropylene)

WFE303 Series, w3150mm



		Ea.	Price, ₩
DH.WFE3031	Center Table, w2250×h1900mm, with Shelves / Sink Table		
DH.WFE3032	, w2550×h1900mm, with Shelves / Sink Table		
DH.WFE3033	, w2850×h1900mm, with Shelves / Sink Table		
DH.WFE3034	, w3150×h1900mm, with Shelves / Sink Table		
DH.WFE3035	, w3750×h1900mm, with Shelves / Sink Table		
DH.WFE3036	, w4350×h1900mm, with Shelves / Sink Table		

※ Assembly Details : See Page 76

※ **Note! Freight and Installation Charges Separately.**

Articles	Cat. No	Description

DAIHAN® Laboratory Assembly Side Table, High Quality Steel-Frame/-Side Panel and Phenol Work Top, SUS Bolted Joint With Transfer Cabinet, Utility Box, 실험실용 조립식 벽면 실험대, 고품질 스틸 프레임, 내열성/내충격성/내화학성 페놀 상판, 볼트식 결합

■ Made in Korea ***■ Easy to Assemble with Stainless-steel(SUS 304) Bolts and Stable***

■ Phenol Work Top : Good for Heat-/Shock-Resistant, Excellent Chemical-Resistant(Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.) ***■ High Quality Steel-Frame, Side-/Back-Steel Panel(t1.6mm)***

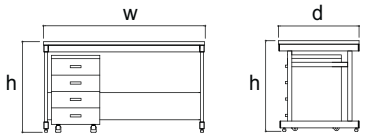
∗ The Most Stable Steel Under Construction, Suitable for Long-term Loading of Heavy Analysis Equipment (60×40mm & 50×30mm)

∗ Chemical-Resistance Phenolic Laminate Work Top, t20mm (Black or Gray) ∗ Could be Change the Work Top, Height of Table on User Applications.

(1) Assembly Basic Side Table, with Transfer Cabinet, Steel-Frame/-Side Panel & Phenol Work Top

∗ Work Top : Phenol Plate, t20mm ∗ Back Panel : Steel Plate, t1.6mm ∗ Frame : Steel, 60×40 & 50×30mm

WFE401 Series, w1800mm



		Ea.	Price, ₩
DH.WFE4011	Side Table, 1200×750×h800mm, with Cabinet(1ea)		
DH.WFE4012	, 1500×750×h800mm, with Cabinet(1ea)		
DH.WFE4013	, 1800×750×h800mm, with Cabinet(1ea)		
DH.WFE4014	, 2100×750×h800mm, with Cabinet(2ea)		
DH.WFE4015	, 2400×750×h800mm, with Cabinet(2ea)		

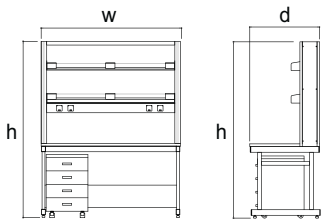
※ Assembly Details : See Page 76

※ **Note! Freight and Installation Charges Separately.**

(2) Assembly Shelf-type Side Table, with Transfer Cabinet/Shelves, Steel-Frame/-Side Panel & Phenol Work Top

∗ Work Top : Phenol Plate, t20mm ∗ Back Panel : Steel Plate, t1.6mm ∗ Shelves : PVC Shelf Plate(t8mm) & Steel / Aluminum Shelf Supporter(t1.6mm)

WFE402 Series, w1800mm

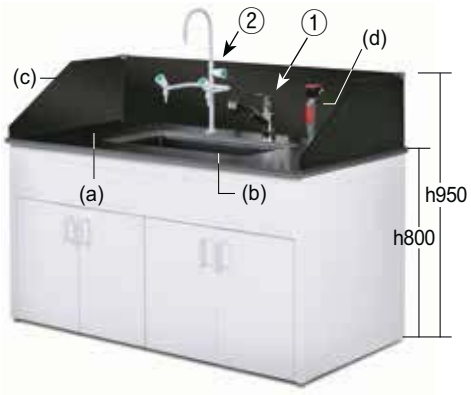


		Ea.	Price, ₩
DH.WFE4021	Side Table, 1200×750×h800/1900mm, with Cabinet / Shelves		
DH.WFE4022	, 1500×750×h800/1900mm, with Cabinet / Shelves		
DH.WFE4023	, 1800×750×h800/1900mm, with Cabinet / Shelves		
DH.WFE4024	, 2100×750×h800/1900mm, with Cabinet / Shelves		
DH.WFE4025	, 2400×750×h800/1900mm, with Cabinet / Shelves		

※ Assembly Details : See Page 76

※ **Note! Freight and Installation Charges Separately.**

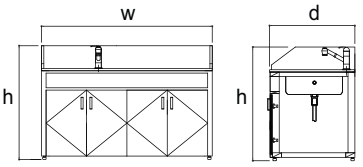
DAIHAN® Laboratory Sink Table, High Quality Steel-Frame/-Side Panel, Phenol Sink Top, PP Sink Bowl, Glass Water Guard With ① Cold & Hot Water Mixed Faucet, 실험실용 싱크대, 3면 강화유리, 재질 변경 가능



∗ ② 3-mouth Chemical Faucet Available(Optional)

∗ Sink Top : Chemical-resistance Phenolic Laminate t20mm ∗ Sink Bowl : PP(Selectable Material)

∗ Water Guard : Composed of 3-sided Tempered Glass t8mm(Selectable Material)



Selectable Material of Custom-Made Sink Table

	Material			
(a) Sink Top	Phenol	P.P	PVC	SUS
(b) Sink Bowl	-	P.P	PVC	SUS
(c) Water Guard	Glass	P.C	PVC	PVC

		Ea.	Price, ₩
DH.WFE4031	Sink Table, Laboratory, 900×750×h800 / 950mm		
DH.WFE4032	, 1200×750×h800 / 950mm		
DH.WFE4033	, 1500×750×h800 / 950mm		
DH.WFE4034	, 1800×750×h800 / 950mm		

Welcome! Custom-Made Sink Table!!

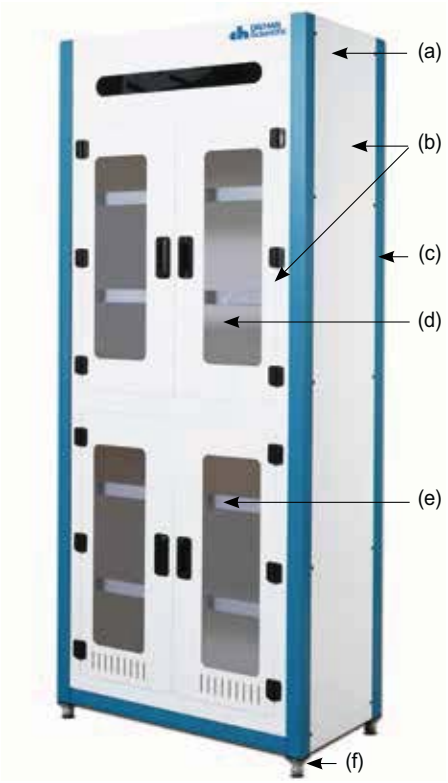
We can Offer DAIHAN Custom Sink Table, for which you can Specify the Specification

Optional Eye-washer

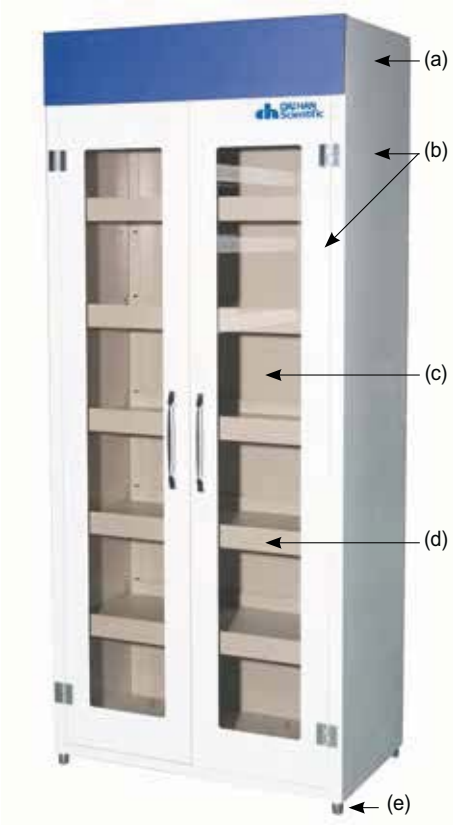
		Ea.	Price, ₩
DH.WFE4040	(d) Option ; Eye-washer, Single Nozzle, Table Mounted, L1.4m		

※ **Note! Freight and Installation Charges Separately.**

DAIHAN® Ducted Safety Cabinet, with Clear PVC-/Safety Glass-Door Window, Built-in PP/Al-buttress With Internal & External PP/Steel Plate, Duct & Pipe Silicon Sealing, Gas Leak Completely Blocked, 닥트형 약품기구 보관장, 환기형



(1) PP Safety Cabinet, **"FGC-2001"**



(2) Steel Safety Cabinet, **"FGC-900"**

- ***Made in Korea*** ■ ***Durable, Hazardous Chemical Gas Remove.***
- ***Internal / External PP Sheet / Steel Plate Good Resistance of Chemicals & Acid.***
- ***Clear PVC-/Tempered Safety Glass-Window***
  (Custom-Made Safety Cabinet : Wide Variety of Material for User Selection)

∗ Discharging Toxic Gas Generated During Storage Various Reagents to the Outside through the Duct Structure
∗ Effective in Maintaining a Comfortable indoor to Prevent the Laboratory Room Air being Polluted.
∗ It may Create a Space to Treat the Harmful Substances in the Human Body Safely and Comfortably
∗ Process Pipe & Duct Silicon Sealing to Completely Block the Gas Leakage to the Outside
∗ Optional Blower User Selection : External-model(Stainless steel-/ Steel-/ PVC-/ PP-Blower)
& Internal-model(Steel-/ PVC-/ PP-Blower)
∗ Optional 24-hour Timer : Automatically Adjustable Exhaust attached to a Safety Cabinet

(1) Ducted PP Safety Cabinet, Clear PVC Door Window

- ***Internal / External PP Material Resistance of Chemicals and Acids***
- ***Built-in PP-buttress*** ■ ***1-Room, 4-Door, 5-Shelf***

∗ Safe Storage of Chemicals and Acids
∗ Door Window : Use the Clear PVC Transparency and Protect the Experimenter Against the Risk of Explosion.
∗ Basic Materials of Construction : Internal(PP), External(PP), 5-stage a Fixed Shelf(PP)

Specifications & Ordering information

Spec. \ Model	"FGC-2001" Length. 900mm	"FGC-2003" Length. 1200mm	"FGC-2005" Length. 1500mm
(a) Duct size	Φ 100mm / Φ 150mm		
(b) Body & Door Material	PP		
(c) Column Material	PVC		
(d) Door Window Material	Clear PVC		
(e) Shelf Material	PP (5 Fixed-type)		
(f) Foot Material	PVC(Height Adjustable up to 30mm)		
Dimension(w × d × h)	900 × 500 × h2100mm	1200 × 500 × h2100mm	1500 × 500 × h2100mm
Power Supply	220V / 60Hz		
Cat. No.	DH.FGC2001	DH.FGC2003	DH.FGC2005
Price, Ea. ₩			

∗ Other Specifications are available upon Customer's Request.

※ **Note! Freight and Installation Charges Separately.**

(2) Ducted Steel Safety Cabinet, Tempered Safety Glass Door Window

- ***Internal/External Steel plate with Powder finished for Resistance of Chemicals***
- ***Built-in Particle Board-plate & Al-buttress*** ■ ***1-Room, 2-Door, 5-Shelf***

∗ Safe Storage of Chemicals
∗ Use Tempered Safety Glass Protects the Experimenter Against the Risk of Explosion.
∗ Basic Materials of Construction : Internal(Steel), External(Steel), 5-stage a Fixed Shelf(PB & Al)

Specifications & Ordering information

Spec. \ Model	"FGC-900" Length. 900mm	"FGC-1200" Length. 1200mm	"FGC-1500" Length. 1500mm
(a) Duct size	Φ 100mm / Φ 150mm		
(b) Body & Door Material	Steel(with Powder Finished)		
(c) Door Window Material	Tempered Safety Glass		
(d) Shelf Material	PB(Particle Board) Plate + Aluminum Buttress (5 Fixed-type)		
(e) Foot Material	Stainless-steel(Height Adjustable up to 30mm)		
Dimension(w × d × h)	900 × 500 × h2100mm	1200 × 500 × h2100mm	1500 × 500 × h2100mm
Power Supply	220V / 60Hz		
Cat. No.	DH.FGC0900	DH.FGC1200	DH.FGC1500
Price, Ea. ₩			

∗ Other Specifications are available upon Customer's Request.

※ **Note! Freight and Installation Charges Separately.**

Articles	Cat. No	Description

DAIHAN® Premium Compact-size Heating Block/Dry Bath Incubator "MaXtable™ H20"

With Large LCD display, Fuzzy Control, Molded Heater, Modular Anodized Aluminum Blocks, up to 150℃, ±0.1℃

히팅 블럭, 디지털 퍼지 컨트롤 시스템, 터치버튼식 조절기, 일체형 주물 히터, 블럭 교체 가능, 블럭 추출용 공구 포함

Heating Block/Dry Bath "MaXtable™ H20-set"

Controller of "MaXtable™ H20"

Included Block (3) "BLC 548" 48holes for 1.5/2ml & Removal Tool

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Designed for Multi-functional Dry Block Heater*** ■ ***Ergonomic Design***
- ***Patented Jog-Dial and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate. with Large Back-Light LCD***
- ***With a Screw-type Block Removal Tool ; Convenient Handling***

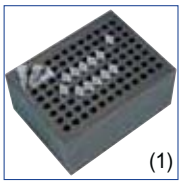
∗ High-performance Molded Heater ensures Best Temperature Accuracy.
∗ Internal Bath Material(PPS) ensures Best Heat Insulation ∗ Rapid heat up time.
∗ Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
∗ Precise Temperature Control : ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃
∗ User Self-Compensation Function to offset between Actual and Displayed Temperature. (±10.0℃)
∗ Digital Timer Included : up to 99hr 59min (Operation Time + Delay Time)
∗ Storage Function of Temperature and Timer setting values
∗ Convenient integral timer for time-sensitive incubations
∗ Alarm Function : Error Status and Timer-end ∗ Easy to Read, Wide LCD Screen
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
∗ Easily calibrated for accurate temperature control and display

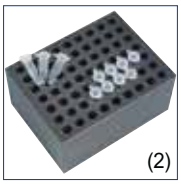
Specifications & Ordering information

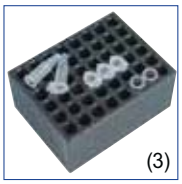
Spec. \ Model	"MaXtable™ H20" (Only Unit)	"MaXtable™ H20-set" (included Standard Block)
Controller	Single Digital Fuzzy Controller	
Useful Block	Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block	None(Only Heating Block Unit)	48 holes×for 1.5/ 2ml Centri. Tube
Heater	Molded Heater(300W)	
Dimension(mm) & Weight(kg)	Unit : 178×226×h138, Block : 90×120×h60	
Temp. Range, & Accuracy	Ambient +5℃ to 150℃, ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃	
Heat-Up Speed & Sensor	Approx. 5℃/min, PT100	
Safety Circuit	Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm	99hr 59min, Alarm (Error Status and Timer - end)	
Display	Digital LCD with Back-Light Function	
Material	Unit : PPS & BAS(HF380), Block : Anodized Aluminum	
Included Standard Acce.	Block Extraction Tool	
Packing Size & Gross Weight	230×290×h245 mm, 2.2 kg	230×355×h245 mm, 3.5 kg
Power Consumption	300 W	
Electric Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No. 230V	DH.WHB02000	DH.WHB02100
Cat. No. 120V	DH.WHB02001	DH.WHB02101
Price, Each. ₩		

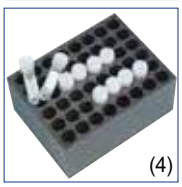
∗ **Other Specifications are available upon Customer's Request.**

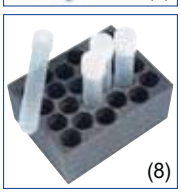
Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)

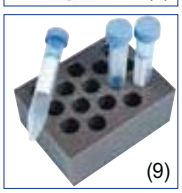


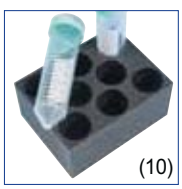












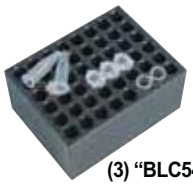
		Ea. Price, ₩
DH.WHB510596	(1) for 0.2ml PCR Tube, (Φ6×h16mm)×96 holes, **"BLC596"**	
DH.WHB510570	(2) for 0.5ml Centri. Tube, (Φ7.7×h29.5mm)×63 holes, **"BLC570"**	
DH.WHB511548	(3) for 1.5/2ml Centri. Tube, (Φ11×h35mm)×48 holes, **"BLC548"** (∗ included in the "H20-Set")	
DH.WHB521248	(4) for Φ12mm Test Tube, (Φ12×h35mm)×48 holes, **"BLT248"**	
DH.WHB521335	(5) for Φ13mm Test Tube, (Φ13×h47mm)×30 holes, **"BLT335"**	
DH.WHB521535	(6) for Φ15mm Test Tube, (Φ15×h47mm)×30 holes, **"BLT535"**	
DH.WHB521628	(7) for Φ16.5mm Test Tube, (Φ16.5×h47mm)×24 holes, **"BLT628"**	
DH.WHB521828	(8) for Φ18mm Test Tube, (Φ18×h47mm)×24 holes, **"BLT828"**	
DH.WHB531515	(9) for 15ml Conical Tube, (Φ16×h47mm)×15 holes, **"BLC515"**	
DH.WHB535008	(10) for 50ml Conical Tube, (Φ28.7×h47mm)×8 holes, **"BLC008"**	
DH.WHB500102	(11) **Spare ;** Block Removal Tool, Easy Handling	

DAIHAN® High-performance Heating Block/Dry Bath Incubator "HB-96D", Heating, Dual-type

With Fuzzy Control, Molded Heater, Modular Anodized Aluminum Blocks, Acrylic Lid, Touch-button Controller, up to 150℃, ±0.1℃

히팅 블럭, 디지털 퍼지 컨트롤 시스템, 듀얼 조절기/블럭, 일체형 주물 히터, 블럭 교체 가능, 아크릴 리드/ 블럭용 집게 포함

Heating Block/Dry Bath, Dual Control System "HB-96D-set"



(3) "BLC548"

(11) "BLE101"

Included Anodized Aluminum Block & Tongs

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Designed for Multi-functional Dry Block Heater***
- ***Dual Controller & Block***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

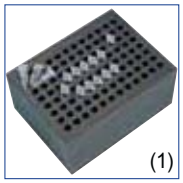
∗ Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
∗ Precise Temperature Control : ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃
∗ User Self-Compensation Function to offset between Actual and Displayed Temperature. (±10.0℃)
∗ Over Temperature & Over Current Protection and Sensor Error Detection
∗ Digital Timer Included : up to 99hr 59min (Operation Time + Delay Time)
∗ Storage Function of Temperature and Timer setting values ∗ Modular Block
∗ Alarm Function : Error Status and Timer-end ∗ Various kind of Blocks are offered (Optional)
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
∗ The Block Removal Tongs are Included for Easy Handling

Specifications & Ordering information

Spec. \ Model		"HB-96D" (Only Unit)	"HB-96D-set" (included Standard Block)
Controller		Dual Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	2×48 holes×for 1.5/ 2ml Centri. Tube
Heater		Molded Heater(300W)×2ea	
Dimension(mm)		Unit : 285×250×h155, Block : (90×120×h60)×2ea	
Temp. Range, & Accuracy		Ambient +5℃ to 150℃, ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃	
Heat-Up Speed & Sensor		Approx. 5℃/min, PT100	
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material		Unit : Stainless-steel (#304) & Powder Coated steel, Block : Anodized Aluminum	
Included Standard Acce.		Block Tongs "BLE101" and Block Cover	
Packing Size & Gross Weight		400×270×h200 mm, 6 kg	
Power Consumption		600 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WHB00198	DH.WHB00199
	120V	DH.WHB02198	DH.WHB02199
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)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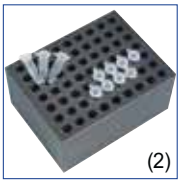
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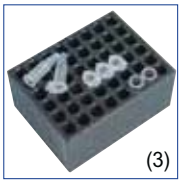
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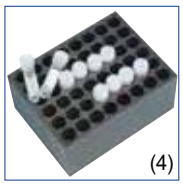
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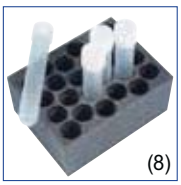
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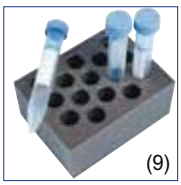
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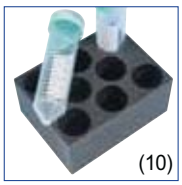
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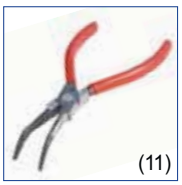

(11)

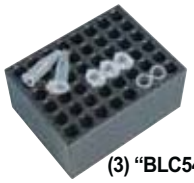
		Ea. Price, ₩
DH.WHB510596	(1) for 0.2ml PCR Tube, (Φ6×h16mm)×96 holes, **"BLC596"**	
DH.WHB510570	(2) for 0.5ml Centri. Tube, (Φ7.7×h29.5mm)×63 holes, **"BLC570"**	
DH.WHB511548	(3) for 1.5/2ml Centri. Tube, (Φ11×h35mm)×48 holes, **"BLC548"** (∗ included in the "HB-96D-Set")	
DH.WHB521248	(4) for Φ12mm Test Tube, (Φ12×h35mm)×48 holes, **"BLT248"**	
DH.WHB521335	(5) for Φ13mm Test Tube, (Φ13×h47mm)×30 holes, **"BLT335"**	
DH.WHB521535	(6) for Φ15mm Test Tube, (Φ15×h47mm)×30 holes, **"BLT535"**	
DH.WHB521628	(7) for Φ16.5mm Test Tube, (Φ16.5×h47mm)×24 holes, **"BLT628"**	
DH.WHB521828	(8) for Φ18mm Test Tube, (Φ18×h47mm)×24 holes, **"BLT828"**	
DH.WHB531515	(9) for 15ml Conical Tube, (Φ16×h47mm)×15 holes, **"BLC515"**	
DH.WHB535008	(10) for 50ml Conical Tube, (Φ28.7×h47mm)×8 holes, **"BLC008"**	
DH.WHB500101	(11) **Spare ;** Block Extraction Tongs, **"BLE101"**	

Articles	Cat. No	Description

DAIHAN® High-performance Heating Block/Dry Bath Incubator-Heating & Cooling "HB-R48"

With Digital PID Control, Acrylic Lid, Precise Temperature Control, Modular Anodized Aluminum Block, −5℃~95℃, ±0.1℃
Peltier Cooling System, Digital Timer, Interchangeable Blocks, **히팅/쿨링 블럭, 블럭 교체 가능, 아크릴 리드/ 블럭용 집게 포함**

"HB-R48-Set"
with Block "BLC548" for 1.5/2ml Centrifuge Tube×48 holes


(3) "BLC548"

(11) "BLE101"

Included Anodized Aluminum Block & Tongs

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Designed for Multi-Function : Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures.***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

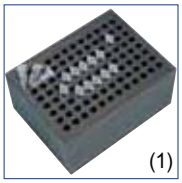
∗ User Self-Compensation Function to offset between Actual and Displayed Temperature. (±10.0℃)
∗ Storage Function of Temperature and Timer setting values
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

Spec. \ Model		"HB-R48" (Only Unit)	"HB-R48-set" (included Standard Block)
Controller		Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	48 holes×for 1.5/ 2ml Centri. Tube
Dimension : Unit & Block		185×230×h220mm, and 90×120×h60mm	
Cooling		Two Peltier Modules	
Cool-Down Speed		2.3℃/min. between 95℃ to 25℃, 0.5℃/min. between 25℃ to -5℃	
Heater and Sensor		300W (Molded Heater), PT100	
Temp. Range, & Accuracy		−5℃ to 95℃, and ±0.1℃ at 37℃, ±0.2℃ at 90℃	
Heat-Up Speed		Approx. 5℃/min	
Safety Device		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material	Internal & External	Stainless-steel (#304), and Powder Coated steel	
	Block	Anodized Aluminum	
Included Standard Acce.		Block Tongs "BLE101" and Block Cover	
Packing Size, Gross Weight		350×220×h310mm, 9 kg	
Power Consumption		450 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WHB00248	DH.WHB00249
	120V	DH.WHB02248	DH.WHB02249
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)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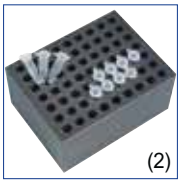
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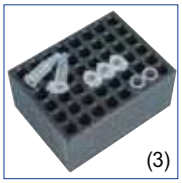
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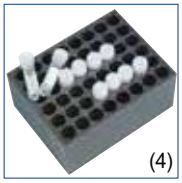
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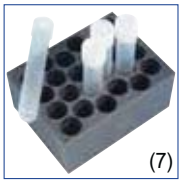
(5)

(6)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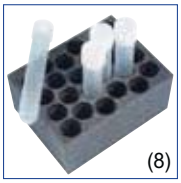
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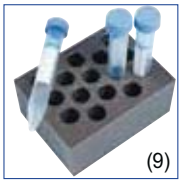
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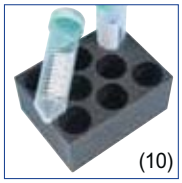
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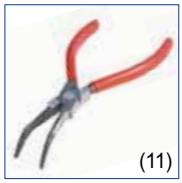

(11)

		Ea. Price, ₩
DH.WHB510596	(1) for 0.2ml PCR Tube, (Φ6×h16mm)×96 holes, **"BLC596"**	
DH.WHB510570	(2) for 0.5ml Centri. Tube, (Φ7.7×h29.5mm)×63 holes, **"BLC570"**	
DH.WHB511548	(3) for 1.5/2ml Centri. Tube, (Φ11×h35mm)×48 holes, **"BLC548"** (∗ included in the "HB-R48-Set")	
DH.WHB521248	(4) for Φ12mm Test Tube, (Φ12×h35mm)×48 holes, **"BLT248"**	
DH.WHB521335	(5) for Φ13mm Test Tube, (Φ13×h47mm)×30 holes, **"BLT335"**	
DH.WHB521535	(6) for Φ15mm Test Tube, (Φ15×h47mm)×30 holes, **"BLT535"**	
DH.WHB521628	(7) for Φ16.5mm Test Tube, (Φ16.5×h47mm)×24 holes, **"BLT628"**	
DH.WHB521828	(8) for Φ18mm Test Tube, (Φ18×h47mm)×24 holes, **"BLT828"**	
DH.WHB531515	(9) for 15ml Conical Tube, (Φ16×h47mm)×15 holes, **"BLC515"**	
DH.WHB535008	(10) for 50ml Conical Tube, (Φ28.7×h47mm)×8 holes, **"BLC008"**	
DH.WHB500101	(11) **Spare ;** Block Extraction Tongs, **"BLE101"**	

Articles	Cat. No	Description

DAIHAN® Precise High-temp & Refrigerated/Heating Bath Circulator, −35+250℃
정밀 고온 배스겸용 고온 써큘레이터와 냉동/가열 배스 겸용 써큘레이터

High Temp Bath Circulator

Refrigerated/Heating Bath Circulator

※ See the "Bath Circulator" Section for the Details.

250℃ High-temp Bath Circulator, 8 · 12 · 22 · 30 Lit ..... P. 34
−25+150℃ Refrigerated/Heating Bath Circulator, 8 · 12 · 22 · 30 Lit ..... P. 35
−35+150℃ Refrigerated/Heating Bath Circulator, 8 · 12 · 22 · 30 Lit ..... P. 36

Therminol D12® −85+230℃ Best COOL-/HEAT-ing Transfer Fluid, Synthetic Hydrocarbon Mixture
For Low/High-Temp Baths, Clearly Harmless Liquid, Low Odor FDA Grade, 4/18/200Lit, **냉매/열매 겸용 합성 탄화수소혼합물(액체)**

(1) 4Lit

(2) 18Lit

■ ***Supplied by "Eastman" USA*** ■ ***Clear, Water white Liquid / Non-Toxic / Low-Smell, FDA-Grade.***
■ ***The Best Circulation Properties / Thermal Stability.***
■ ***The Lowest Viscosity, cP ▶ (1) -50℃ : 12cP, (2) 100℃ : 0.46cP, (3) 200℃ : 0.19cP, (4) 230℃ : 0.16cP***
∗ Specific Gravity : 0.759 at 25℃ ∗ Autoignition Temp : 247℃ ∗ Flash Point : 62℃
∗ Freezing Point : -94℃ ∗ Boiling Point(90%) : 204℃ ∗ Do not use for Sillicone Tube
∗ Package : (1) 4Lit and (2) 18Lit PE Square Bottle / Subdivision, Original-200Lit Steel Drum / 155kg

		4ℓ.dh pk ₩
SL.CirD12.1	(1) "Therminol D12" Cool/Heat Transfer Fluid, -85 +230℃, 4 Lit	4Lit
		18ℓ.dh pk ₩
SL.CirD12.2	(2) "Therminol D12" Cool/Heat Transfer Fluid, -85 +230℃, 18Lit	18Lit
	※ 운임 약 ₩ 25,000 별도!	Drum Price,₩
SL.CirD12	"Therminol D12" Cool/Heat Transfer Fluid, -85 +230℃, 200Lit/Drum	200Lit

Heating Transfer Fluid, 20Lit

SYN THERM 22L® −5+320℃ Heating Transfer Fluid, Synthetic Alkylbenzene Derivative
For Low- & High-Temp Circulation, **알킬벤젠계 합성열매** NEW

■ ***Made in Korea***
∗ Hazards Identification of MSDS(Material Safety Data Sheet) :
- H315 Causes Skin Irritation - H319 Causes Serious Eye Irritation
- H335 May Cause Respiratory Irritation - H336 May Cause Drowsiness or Dizziness
∗ Kinematic Viscosity & Density :
(1) at 0℃ : 22.7cSt, 0.885kg/ℓ (2) at 40℃ : 21.80cSt, 0.859kg/ℓ
(3) at 80℃ : 6.09cSt, 0.834kg/ℓ (4) at 140℃ : 6.09cSt, 0.795kg/ℓ
(5) at 200℃ : 1.10cSt, 0.756kg/ℓ (6) at 260℃ : 0.74cSt, 0.718kg/ℓ

		Pk. Price, ₩
SL.SYN22L	SYN THERM 22L® Heating Transfer Fluid -5 +320℃, 20Lit	20Lit

DAIHAN® −30+200℃ Precise Refrigerated Heating External Circulator "MaXircu™ WHR", Fill-10 · 18 · 25 Lit

Ideal for Evaporator/Reactor &c. Heating & Cooling Line, with Pre-Cooling Sys, Used with External Direct Contact K-type Temp. Probe(Optional)
With High Quality Magnetic Pump, Flow 20 · 40 · 60 Lit/min, Lift 38m, ±0.2℃, **정밀 고온/냉동 겸용 외부 써큘레이터**

−30℃ ~ +200℃ Refrigerated / Heating External Circulator, "MaXircu™ WHR-50"

"MaXircu™ WHR" in the Reactor System.

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance*** ■ ***Max. Lift : 38m***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Patented Jog-Dial Control System and Digital LCD with Back-Light Function.***

∗ Innovated Powerful Circulation Pump ensures Temp. Uniformity
: Internal and External Circulation (Max Flow Rate : 20 · 40 · 60 Lit/min)
∗ Assembly-type Safety Connection Ports/Pipe
(for Fluid In/Out-let : ISO RC 1" Screw Stainless-steel.)
∗ With High Quality Shock-proof Caster for Convenient and Safe Moving.
∗ Embedded External Nozzle Part for the Prevention of Nozzle Damaged.
∗ Stainless-steel Internal Bath for Prevention of Corrosion.

Connection Ports

∗ Independently 3-systems : Refrigerating System, Heating System, Pre-Cooling System.
∗ Urethane Foam Insulation ∗ Warning and Auto-Stop Function in case of Liquid Shortage.
∗ More Faster Cool-down and Heat-up Time ∗ Connection with Evaporator or Viscometer is applicable.

Specifications & Ordering information

Spec. \ Model		"MaXircu™ WHR-20" Useful for 5~20Lit Reactor	"MaXircu™ WHR-50" Useful for 20~50Lit Reactor	"MaXircu™ WHR-100" Useful for 50~100Lit Reactor
Temp. Range & Stability		−30℃~ +200℃-Range, ±0.2℃(at 15℃)-Stability		
Heat-Fluid Filling Volume		10 Lit max	18 Lit max	25 Lit max
Useful for 5~100Lit Reactor		for 5~20Lit Reactor	for 20~50Lit Reactor	for 50~100Lit Reactor
Refrigerator Capacity		4.5 kW	7.5 kW	18 kW
Heater		2.5 kW	6.0 kW	12 kW
Lid & Top Opening Dia.		Φ80 mm		
Fluid In/Out-let Connector		ISO RC 1" (English System AG 1") Thread, Stainless-steel		
Pump Power, Lift Height, m	Max. Flow Rate	20 Lit/min	40 Lit/min	60 Lit/min
	Max. Pressure & Lift	Max Pressure : 4 bar, Max. Lift : 38m		
Cooling Capacity	at +15℃	8.1 kW	13.1 kW	22.7 kW
	at 0℃	4.3 kW	7.3 kW	12.6 kW
	at −25℃	1.4 kW	3.1 kW	5.45 kW
External Dimension		600×750×h1100 mm	650×850×h1300 mm	750×900×h1500 mm
Optional External Temp. Sensor K-type Probe		Can be used with External Direct Contact K-type Temp. Probe. (Optional)		
Material		Internal : Stainless-steel, External : Powder Coated steel		
Electrical Reqts.		3Phase 380V		
Cat. No.	60Hz	DH.WHR0020	DH.WHR0050	DH.WHR0100
	50Hz	DH.WHR0025	DH.WHR0055	DH.WHR0150
Price, Each. ₩				

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

Insulated Silicone & Teflon PFA Circulation Hose, Id Φ10 ~ 19mm, L1/1.5m

■ ***Supplied by SciLab Korea*** ∗ Φ37mm Black NBR Foam Insulated Silicone or PFA-Hose
∗ Silicone Vacu-Hose : id 10×od 13mm, id 15×od 20mm, id 18×od 24mm, 220℃
∗ PFA Hose : id 10×od 12mm & PTFE Hose : id 15×od 16mm, id 19×od 21mm, -100 + 260℃

(1) Insulated Silicone Hose, 220℃

		dh Pk. Price,₩
SL.Tub4021	Sili-hose, id 10mm, L1m	1m
SL.Tub4022	, L1.5m	1.5m
SL.Tub4023	, id 15mm, L1m	1m
SL.Tub4024	, L1.5m	1.5m
SL.Tub4025	, id 18mm, L1m	1m
SL.Tub4026	, L1.5m	1.5m

(2) Insulated PFA Hose, 260℃

		dh Pk. Price,₩
SL.Tub4031	PFA-hose, id 10mm, L1m	1m
SL.Tub4032	, L1.5m	1.5m
SL.Tub4033	PTFE-hose, id 15mm, L1m	1m
SL.Tub4034	, L1.5m	1.5m
SL.Tub4035	, id 19mm, L1m	1m
SL.Tub4036	, L1.5m	1.5m

(3) Best Insulatedly & Flexible Stainless-steel Circulation Hose, Id Φ17mm, L1m, 360℃

		Ea. Price,₩
SL.Tub7021	Flexible Stainless-steel Circulation Hose, id 17×od 60mm, L1m	

※ See the Preceding Page for Cooling / Heating Transfer Fluid

DAIHAN Scientific

Heating Mantle

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

For Beaker - Basic-type ····· P. 86
- Stirring-type ····· P. 86
For Flask - Basic-type ····· P. 87
- Fabric Housing ····· P. 89
- Remote Control ····· P. 88~89
- Stirring-type ····· P. 87
For Reaction Vessel - Basic-type ····· P. 90
- Remote Control ····· P. 91
- Stirring-type ····· P. 90
For Soxhlet/Extraction ····· P. 92
Heating Tape and Custom Made ····· P. 93
Heating Product Controller ····· P. 94

Beaker Basic-type
"WHM12146"

Beaker Stirring-type
"WHM121606"

Flask Basic-type
"WHM12014"

Flask Stirring-type
"WHM12034"

Flask High Temp-type
"WHM12094"

Reaction Flask
"WHM8224"

Fabric Housing
"WHM12114"

Fabric Housing
"WHM121303"

Reaction Vessel
"WHM8153"

Reaction Vessel
"WHM8180"

Analog 6 places Heating Mantle
"WHM12293"

Analog Compact Controller
"WHM-C10A"

Digital Feedback Controller
"WHM-C10D"

DAIHAN® Aluminum-case Beaker Heating Mantle, (1) Basic & (2) Stirring-type, 450℃, 100~5,000㎖

With Built-in Temp Controller, with/without Mag-stir Speed Control, with Certi. & Traceability

비커용 히팅맨틀, 온도 조절기 내장, "기본형" 및 "자석교반형", Ni-Cr열선 내장

- ***Made in Korea***
- ***Ideal for All type Beaker***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Built-in Temp-Controller. Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***

(1) Basic-type Beaker Mantle with Controller

(1) Basic-type Beaker Mantle, Built-in Temp. Controller

∗ With a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.

Beakers, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
100ml, Φ50~52	80 W	40 mm	Φ145×h140	**DH.WHM12141**	**DH.WHM12151**	
250ml, Φ68~70	140 W	65 mm	Φ145×h140	**DH.WHM12142**	**DH.WHM12152**	
400ml, Φ79~81	240 W	70 mm	Φ145×h140	**DH.WHM12143**	**DH.WHM12153**	
600ml, Φ88~90	240 W	75 mm	Φ145×h140	**DH.WHM12144**	**DH.WHM12154**	
800ml, Φ98~100	300 W	90 mm	Φ190×h165	**DH.WHM12145**	**DH.WHM12155**	
1,000ml, Φ105~108	350 W	90 mm	Φ190×h165	**DH.WHM12146**	**DH.WHM12156**	
2,000ml, Φ130~132	450 W	125 mm	Φ199×h190	**DH.WHM12147**	**DH.WHM12157**	
3,000ml, Φ151~153	550 W	160 mm	Φ270×h235	**DH.WHM12148**	**DH.WHM12158**	
4,000ml, Φ160~162	700 W	160 mm	Φ270×h235	**DH.WHM121481**	**DH.WHM121581**	
5,000ml, Φ169~171	800 W	160 mm	Φ270×h235	**DH.WHM12149**	**DH.WHM12159**	

(2) Stirring-type Beaker Mantle with a Stir-Bar

(2) Stirring-type Beaker Mantle, Built-in 50~75rpm Mag-stir Speed & Temp. Controller

∗ With a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.
∗ With 1ea × PTFE Octagonal Magnetic Stirrer Bar, L38mm

Beakers, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
100ml, Φ50~52	80 W	45 mm	Φ145×h140	**DH.WHM121601**	**DH.WHM121611**	
250ml, Φ68~70	140 W	70 mm	Φ190×h165	**DH.WHM121602**	**DH.WHM121612**	
400ml, Φ79~81	240 W	70 mm	Φ190×h165	**DH.WHM121603**	**DH.WHM121613**	
600ml, Φ88~90	240 W	72 mm	Φ190×h165	**DH.WHM121605**	**DH.WHM121615**	
1,000ml, Φ105~108	350 W	105 mm	Φ190×h190	**DH.WHM121606**	**DH.WHM121616**	
2,000ml, Φ130~132	450 W	140 mm	Φ270×h235	**DH.WHM121607**	**DH.WHM121617**	
3,000ml, Φ151~153	550 W	140 mm	Φ270×h235	**DH.WHM121608**	**DH.WHM121618**	
4,000ml, Φ160~162	700 W	170 mm	Φ325×h270	**DH.WHM121609**	**DH.WHM121619**	
5,000ml, Φ169~171	800 W	170 mm	Φ325×h270	**DH.WHM121610**	**DH.WHM121620**	

(3) Stand Rod, "RD300", Φ12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

Optional Stainless-steel Rod, Holder & Clamp

		Ea. Price, ₩
DH.WHP503037	(3) Stand Rod, Φ12.7×L520mm, **"RD300",** for Heating Mantles	
DH.WHP503012	(4) Holder / Clamp / Clip, **"CL220",** for Temp. Sensor	

DAIHAN® Aluminium-case Flask Heating Mantle, (1) Basic & (2) Stirring-type, 450℃, 50~20,000㎖

With Built-in Temp Controller, with/without Mag-stir Speed Control, with Certi. & Traceability

라운드플라스크용 히팅맨틀, 온도 조절기 내장, "기본형" 및 "자석교반형", Ni-Cr열선 내장

- ***Made in Korea*** ■ ***Ideal for All type Round Flask***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Built-in Temp-Controller. Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***
- ***With Powder-coated Steel-case : 10-/20-Lit***

(1) Basic-type Flask Mantle with Controller

(2) Stirring-type Flask Mantle with a Stir-Bar

(1) Basic-type Flask Mantle, Built-in Temp. Controller

∗ Heating Mantles for 50ml~6,000ml Flask are with a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.

Flasks, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
50ml, Φ49~52	90 W	30 mm	Φ145×h140	DH.WHM12010	DH.WHM12020	
100ml, Φ63~66	90 W	50 mm	Φ145×h140	DH.WHM12011	DH.WHM12021	
250ml, Φ83~86	160 W	55 mm	Φ145×h140	DH.WHM12012	DH.WHM12022	
500ml, Φ102~105	250 W	70 mm	Φ190×h165	DH.WHM12013	DH.WHM12023	
1,000ml, Φ130~133	350 W	85 mm	Φ190×h165	DH.WHM12014	DH.WHM12024	
2,000ml, Φ165~169	490 W	100 mm	Φ270×h200	DH.WHM12015	DH.WHM12025	
3,000ml, Φ184~187	600 W	110 mm	Φ270×h200	DH.WHM12016	DH.WHM12026	
4,000ml, Φ206~208	750 W	140 mm	Φ325×h226	DH.WHM8037	DH.WHM8037.1	
5,000ml, Φ221~225	850 W	130 mm	Φ325×h226	DH.WHM12017	DH.WHM12027	
6,000ml, Φ234~237	850 W	130 mm	Φ325×h226	DH.WHM12018	DH.WHM12028	
10Lit, Φ278~282	1,500 W	205 mm	Φ400×h260	DH.WHM12019	DH.WHM12029	
20Lit, Φ344~350	2,000 W	220 mm	Φ460×h280	DH.WHM12070	DH.WHM12071	

(2) Stirring-type Flask Mantle, Built-in 50~75rpm Mag-stir Speed & Temp. Controller

∗ Heating Mantles for 50ml~6,000ml Flask are with a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.
∗ 10-/20-Lit models Square-type Outside Shape.
∗ With 1ea × PTFE Oval-type Magnetic Stirrer Bar, L25mm.

Flasks, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
50ml, Φ49~52	90 W	45 mm	Φ145×h140	DH.WHM12030	DH.WHM12040	
100ml, Φ63~66	90 W	45 mm	Φ145×h140	DH.WHM12031	DH.WHM12041	
250ml, Φ83~86	160 W	45 mm	Φ145×h140	DH.WHM12032	DH.WHM12042	
500ml, Φ102~105	250 W	70 mm	Φ190×h165	DH.WHM12033	DH.WHM12043	
1,000ml, Φ130~133	350 W	90 mm	Φ190×h190	DH.WHM12034	DH.WHM12044	
2,000ml, Φ165~169	490 W	105 mm	Φ270×h200	DH.WHM12035	DH.WHM12045	
3,000ml, Φ184~187	600 W	105 mm	Φ270×h200	DH.WHM12036	DH.WHM12046	
4,000ml, Φ206~208	750 W	135 mm	Φ325×h226	DH.WHM8057	DH.WHM8057.1	
5,000ml, Φ221~224	850 W	130 mm	Φ325×h226	DH.WHM12037	DH.WHM12047	
6,000ml, Φ234~237	850 W	130 mm	Φ325×h226	DH.WHM12038	DH.WHM12048	
10Lit, Φ278~282	1,500 W	210 mm	440×510×h310	DH.WHM8060	DH.WHM8060.1	
20Lit, Φ344~348	2,000 W	230 mm	440×550×h330	DH.WHM8061	DH.WHM8061.1	

Optional Stainless-steel Rod, Holder & Clamp

		Ea. Price, ₩
DH.WHP503037	(3) Stand Rod, Φ12.7×L520mm, **"RD300"**, for Heating Mantles	
DH.WHP503012	(4) Holder / Clamp / Clip, **"CL220"**, for Temp. Sensor	

Articles	Cat. No	Description

DAIHAN® Remotecontrolled Flask Heating Mantle, (1) 450℃ Basic & (2) 650℃ High Temp-type, 50㎖~100Lit

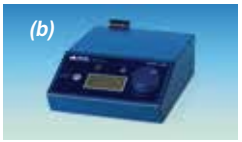
For Spherical Flask, with Nickel Chrome Heating Element, K-type Thermo-Sensor Integrated, with Certi. & Traceability, Option-Controller

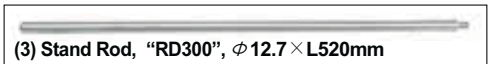
라운드플라스크용 히팅맨틀, K-type 온도센서, Ni-Cr열선 내장, 자력교반기와 사용가능, 조절기 별도

- ***Made in Korea***
- ***Ideal for All type Round Flask and Use with Magnetic Stirrer***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Optional Remote Thermo Controller, K-type Themo-Senser, and Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***
- ***Heating Mantles for 50ml~6,000ml Flask are with a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.***

(1) 450℃ Basic-type

(2) 650℃ High Temp.-type





(3) Stand Rod, "RD300", Φ12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

(1) 450℃ Basic-type, 50㎖~100Lit

① with Aluminum-case, 50~6000ml ② with Powder-coated Steel-case, 10~100Lit

Flasks, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
50ml, Φ49~52	90 W	30 mm	Φ145×h75	**DH.WHM12050**	**DH.WHM12060**	
100ml, Φ63~66	90 W	50 mm	Φ145×h75	**DH.WHM12051**	**DH.WHM12061**	
250ml, Φ83~86	160 W	50 mm	Φ145×h75	**DH.WHM12052**	**DH.WHM12062**	
500ml, Φ102~105	250 W	55 mm	Φ190×h80	**DH.WHM12053**	**DH.WHM12063**	
1,000ml, Φ130~133	350 W	85 mm	Φ190×h110	**DH.WHM12054**	**DH.WHM12064**	
2,000ml, Φ165~169	490 W	105 mm	Φ270×h135	**DH.WHM12055**	**DH.WHM12065**	
3,000ml, Φ184~187	600 W	110 mm	Φ270×h135	**DH.WHM12056**	**DH.WHM12066**	
4,000ml, Φ206~208	750 W	135 mm	Φ325×h165	**DH.WHM8078**	**DH.WHM8078.1**	
5,000ml, Φ221~224	850 W	130 mm	Φ325×h165	**DH.WHM12057**	**DH.WHM12067**	
6,000ml, Φ234~237	850 W	130 mm	Φ325×h165	**DH.WHM12058**	**DH.WHM12068**	
10Lit, Φ278~282	1,500 W	205 mm	Φ390×h240	**DH.WHM12073**	**DH.WHM12083**	
20Lit, Φ344~348	2,000 W	220 mm	Φ460×h280	**DH.WHM12074**	**DH.WHM12084**	
50Lit, Φ489~494	4,000 W	310 mm	Φ610×h390	**DH.WHM12075**	**DH.WHM12085**	
100Lit, Φ609~614	6,000 W	370 mm	Φ740×h450	**DH.WHM8084**	**DH.WHM8084.1**	

(2) 650℃ High Temp-type, 100㎖~10Lit

① with Aluminum-case, 100~6000ml ② with Powder-coated Steel-case, 10Lit

Flasks, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
100ml, Φ63~66	160 W	50 mm	Φ145×h75	**DH.WHM12091**	**DH.WHM12101**	
250ml, Φ83~86	250 W	50 mm	Φ145×h75	**DH.WHM12092**	**DH.WHM12102**	
500ml, Φ102~105	350 W	55 mm	Φ190×h80	**DH.WHM12093**	**DH.WHM12103**	
1,000ml, Φ130~133	490 W	85 mm	Φ190×h110	**DH.WHM12094**	**DH.WHM12104**	
2,000ml, Φ165~169	600 W	105 mm	Φ270×h135	**DH.WHM12095**	**DH.WHM12105**	
3,000ml, Φ184~187	750 W	105 mm	Φ270×h135	**DH.WHM12096**	**DH.WHM12106**	
4,000ml, Φ206~208	850 W	125 mm	Φ325×h165	**DH.WHM8097**	**DH.WHM8097.1**	
5,000ml, Φ221~224	1,500 W	130 mm	Φ325×h165	**DH.WHM12097**	**DH.WHM12107**	
6,000ml, Φ234~237	1,500 W	130 mm	Φ325×h165	**DH.WHM12098**	**DH.WHM12108**	
10Lit, Φ278~282	2,000 W	160 mm	Φ400×h260	**DH.WHM8100**	**DH.WHM8100.1**	

Optional Remote Controller

	Cat. No		Ea. Price, ₩
	with 230V	with 120V	
(a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW	**DH.WHM13500**	**DH.WHM23500**	
(b) Digital Remote Controller, Ambient +5 ~ 700℃, ±1℃ Uniformity at Set Temp.	**DH.WHM12500**	**DH.WHM22500**	

Optional Temp. Probe & Stand Rod, Holder, Clamp for Digital Temp. Remote Controller

		Ea. Price, ₩
DH.WHP503040	Direct Contact Temp. Probe, K-type, **"SS300"**, L250×Φ 4.8 mm	
DH.WHP503050	, **"SS400"**, L380×Φ 4.8 mm	
DH.WHP503041	Direct Contact Temp. Probe, K-type, **"SS310"**, Teflon Coated, L250×Φ5 mm	
DH.WHP503051	Direct Contact Temp. Probe, K-type, **"SS410"**, Teflon Coated, L380×Φ5 mm	
DH.WHP503037	(3) Stand Rod, Φ12.7×L520mm, **"RD300",** for Heating Mantles	
DH.WHP503012	(4) Holder / Clamp / Clip, **"CL220",** for Temp. Sensor	

Articles	Cat. No	Description

DAIHAN® Remotecontrolled Reaction Flask Heating Mantle, Bottom Outlet-type, 450℃, 2,000㎖~50Lit

With Nickel Chrome Heating Element, K-type Thermo-sensor Integrated, with Certi. & Traceability, Option-Controller

반응조용 히팅맨틀, 반응조 라운드 플라스크용, K-type 온도센서, Ni-Cr열선 내장, 조절기 별도

- ***Made in Korea*** ■ ***Ideal for All type Reaction Flasks***
- ***Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***
- ***With a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.***
- ***Optional Remote Thermo Controller, K-type Themo-Senser***

Flasks, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
2,000ml, Φ165~169	550 W	110 mm	Φ270×h135	DH.WHM8222	DH.WHM8222.1	
3,000ml, Φ184~186	550 W	130 mm	Φ270×h165	DH.WHM8232	DH.WHM8232.1	
5,000ml, Φ224~226	800 W	135 mm	Φ325×h165	DH.WHM8233	DH.WHM8233.1	
10Lit, Φ278~282	1400 W	200 mm	Φ400×h250	DH.WHM8226	DH.WHM8226.1	
20Lit, Φ348~352	2000 W	230 mm	Φ440×h290	DH.WHM8227	DH.WHM8227.1	
50Lit, Φ480~484	4000 W	300 mm	Φ625×h360	DH.WHM8228	DH.WHM8228.1	

DAIHAN® Fabric-Housed Heating Mantle, (1) Self Standing-base & (2) Top Cover, 450℃, 50㎖~100Lit

For Spherical Flask, with Nickel Chrome Heating Element, Option-Controller, with Certi. & Traceability

직물케이스 히팅맨틀, Ni-Cr열선 내장, 자력교반기와 사용가능, 조절기 별도

- ***Made in Korea*** ■ ***Ideal for All type Round Flask and Use with Magnetic Stirrer***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Built-in Temp-Controller. Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***

(1) Self Standing-base

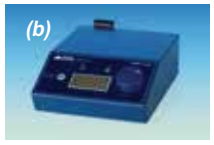
(1) Self Standing-base Mantle

Flasks, ml Dia. Φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(mm)	with 230V	with 120V	
50ml, Φ49~52	90 W	30 mm	Φ100×h50	DH.WHM12110	DH.WHM12120	
100ml, Φ63~66	90 W	50 mm	Φ120×h70	DH.WHM12111	DH.WHM12121	
250ml, Φ83~86	160 W	55 mm	Φ150×h80	DH.WHM12112	DH.WHM12122	
500ml, Φ102~105	250 W	75 mm	Φ180×h100	DH.WHM12113	DH.WHM12123	
1,000ml, Φ130~133	350 W	90 mm	Φ210×h115	DH.WHM12114	DH.WHM12124	
2,000ml, Φ165~169	490 W	105 mm	Φ250×h130	DH.WHM12115	DH.WHM12125	
3,000ml, Φ184~187	600 W	115 mm	Φ270×h140	DH.WHM12116	DH.WHM12126	
4,000ml, Φ206~208	750 W	120 mm	Φ310×h160	DH.WHM8108	DH.WHM8108.1	
5,000ml, Φ221~224	850 W	135 mm	Φ310×h160	DH.WHM12117	DH.WHM12127	
6,000ml, Φ234~237	850 W	135 mm	Φ310×h160	DH.WHM12118	DH.WHM12128	
10Lit, Φ278~282	1,500 W	205 mm	Φ390×h260	DH.WHM12119	DH.WHM12129	

<Ex.>(2) Top Cover with (1) Self Standing-base

(2) Top Cover only

Flasks, ml Dia. Φ mm	Mantle		Catalog No.		Ea. Price, ₩
	Watts (W)	Outside Φ × h(mm)	with 230V	with 120V	
250ml, Φ83~86	90 W	Φ136×h70	DH.WHM121301	DH.WHM121311	
500ml, Φ102~105	160 W	Φ160×h77	DH.WHM121302	DH.WHM121312	
1,000ml, Φ130~133	250 W	Φ183×h90	DH.WHM121303	DH.WHM121313	
2,000ml, Φ165~169	350 W	Φ220×h107	DH.WHM121304	DH.WHM121314	
3,000ml, Φ184~187	490 W	Φ236×h210	DH.WHM121305	DH.WHM121315	
4,000ml, Φ206~208	490 W	Φ260×h130	DH.WHM8117	DH.WHM8117.1	
5,000ml, Φ221~224	600 W	Φ280×h140	DH.WHM121306	DH.WHM121316	
10Lit, Φ278~282	850 W	Φ350×h170	DH.WHM121307	DH.WHM121317	
20Lit, Φ344~348	1,500 W	Φ420×h210	DH.WHM121308	DH.WHM121318	
50Lit, Φ489~494	2,000 W	Φ590×h290	DH.WHM8121	DH.WHM8121.1	
100Lit, Φ609~614	2,000 W	Φ700×h340	DH.WHM8122	DH.WHM8122.1	



Optional Remote Controller

	Cat. No.		Ea. Price, ₩
	with 230V	with 120V	
(a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW	DH.WHM13500	DH.WHM23500	
(b) Digital Remote Controller, Ambient +5 ~ 700℃, ±1℃ Uniformity at Set Temp.	DH.WHM12500	DH.WHM22500	

Articles	Cat. No	Description

DAIHAN® Reaction Vessel Heating Mantle, (1) Basic & (2) Stirring-type, 450℃, 100㎖~100Lit

With Built-in Temp Controller, with/without Mag-stir Speed Control, with Certi. & Traceability

반응조용 히팅맨틀, 온도 조절기 내장, "기본형" 및 "자석교반형", Ni-Cr열선 내장

- ***Made in Korea*** ■ ***Powder-coated Steel Housing*** ■ ***Ideal for All type Reaction Vessel***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Built-in Temp-Controller. Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***
- ***Heating Mantles for 50ml~6,000ml Flask are with a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.***

(1) Basic-type Reaction Vessel Mantle with Temp. Controller

(1) Basic-type Reaction Vessel Mantle, Built-in Temp. Controller

① with Aluminum-case, 100~500ml ② with Powder-coated Steel-case, 1000ml ~ 100Lit

Vessels, ml Dia. Φ × H(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(cm)	with 230V	with 120V	
100ml, Φ7×H9	80 W	6.5 cm	Φ14.5×h14.0	**DH.WHM8130**	**DH.WHM8130.1**	
250ml, Φ7×H13	140 W	9.0 cm	Φ19.0×h16.5	**DH.WHM8131**	**DH.WHM8131.1**	
500ml, Φ11×H12	350 W	9.0 cm	Φ19.0×h16.5	**DH.WHM12146**	**DH.WHM12156**	
1,000ml, Φ11×H20	350 W	16.0 cm	Φ19.0×h26.0	**DH.WHM8133**	**DH.WHM8133.1**	
2,000ml, Φ13×H24	450 W	18.5 cm	Φ19.0×h26.0	**DH.WHM8134**	**DH.WHM8134.1**	
2,000ml, Φ14×H27	550 W	24.5 cm	Φ20.6×h30.0	**DH.WHM8135**	**DH.WHM8135.1**	
3,000ml, Φ13×H32	550 W	24.5 cm	Φ19.0×h32.0	**DH.WHM8136**	**DH.WHM8136.1**	
4,000ml, Φ20×H29	800 W	23.5 cm	Φ32.5×h30.0	**DH.WHM8138**	**DH.WHM8138.1**	
5,000ml, Φ20×H29	800 W	23.5 cm	Φ32.5×h30.0			
6,000ml, Φ21.5×H32	800 W	23.5 cm	Φ32.5×h30.0	**DH.WHM8139**	**DH.WHM8139.1**	
10Lit, Φ21.5×H45	1,400 W	35.0 cm	Φ35.0×h40.0	**DH.WHM8140**	**DH.WHM8140.1**	
10Lit, Φ24×H41	1,400 W	33.0 cm	Φ35.0×h36.0	**DH.WHM8141**	**DH.WHM8141.1**	
20Lit, Φ25×H47	2,000 W	40.0 cm	Φ35.0×h45.0	**DH.WHM8142**	**DH.WHM8142.1**	
20Lit, Φ27×H45	2,000 W	35.0 cm	Φ40.0×h40.0	**DH.WHM8143**	**DH.WHM8143.1**	
20Lit, Φ29×H42	2,000 W	35.0 cm	Φ40.0×h40.0	**DH.WHM8144**	**DH.WHM8144.1**	
50Lit, Φ31.5×H81	4,000 W	67.0 cm	Φ44.0×h75.0	**DH.WHM8145**	**DH.WHM8145.1**	
100Lit, Φ41.5×H91	6,000 W	75.0 cm	Φ55.0×h83.0	**DH.WHM8146**	**DH.WHM8146.1**	

(2) Stirring-type Reaction Vessel Mantle with Temp.-/Stirring-Controller and 1× Mag Stir bar

(2) Stirring-type Reaction Vessel Mantle, Built-in 50~75rpm Mag-stir Speed & Temp. Controller

∗With 1ea×PTFE Oval-type Magnetic Stirrer Bar, L25mm.
∗10-/20-Lit models Square-type Outside Shape.
① with Aluminum-case, 100~500ml ② with Powder-coated Steel-case, 1000ml ~ 20Lit

Vessels, ml Dia. Φ × H(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(cm)	with 230V	with 120V	
100ml, Φ7×H9	80 W	7.0 cm	Φ14.5×h16.5	**DH.WHM8150**	**DH.WHM8150.1**	
250ml, Φ7×H13	140 W	9.0 cm	Φ14.5×h18.5	**DH.WHM8151**	**DH.WHM8151.1**	
500ml, Φ11×H12	240 W	9.5 cm	Φ19.0×h19.0	**DH.WHM8152**	**DH.WHM8152.1**	
1,000ml, Φ11×H20	350 W	16.5 cm	Φ19.0×h26.0	**DH.WHM8153**	**DH.WHM8153.1**	
2,000ml, Φ13×H24	450 W	16.5 cm	Φ19.0×h26.0	**DH.WHM8154**	**DH.WHM8154.1**	
2,000ml, Φ14×H27	550 W	22.5 cm	Φ20.6×h30.0	**DH.WHM8155**	**DH.WHM8155.1**	
3,000ml, Φ13×H32	550 W	22.5 cm	Φ19.0×h32.0	**DH.WHM8156**	**DH.WHM8156.1**	
4,000ml, Φ20×H29	800 W	23.5 cm	Φ32.5×h30.0	**DH.WHM8158**	**DH.WHM8158.1**	
5,000ml, Φ20×H29	800 W	23.5 cm	Φ32.5×h30.0			
6,000ml, Φ21.5×H32	800 W	23.5 cm	Φ32.5×h30.0	**DH.WHM8159**	**DH.WHM8159.1**	
10Lit, Φ21.5×H45	1400 W	40.0 cm	35×46×h48	**DH.WHM8160**	**DH.WHM8160.1**	
10Lit, Φ24×H41	1400 W	37.0 cm	35×46×h39.5	**DH.WHM8161**	**DH.WHM8161.1**	
20Lit, Φ25×H47	2000 W	48.5 cm	35×46×h56.5	**DH.WHM8162**	**DH.WHM8162.1**	

(3) Stand Rod, "RD300", Φ12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

Optional Stainless-steel Rod, Holder & Clamp

		Ea. Price, ₩
DH.WHP503037	(3) Stand Rod, Φ12.7×L520mm, **"RD300",** for Heating Mantles	
DH.WHP503012	(4) Holder / Clamp / Clip, **"CL220",** for Temp. Sensor	

Articles	Cat. No	Description

DAIHAN® Remotecontrolled Reaction Vessel Heating Mantle, (1)Plain Bottom & (2)Bottom Outlet-type, 450℃, 100㎖~100Lit

With Nickel Chrome Heating Element, K-type Thermo-Sensor Integrated, with Certi. & Traceability, Option-Controller

반응조용 히팅맨틀, K-type 온도센서, Ni-Cr열선 내장, 자력교반기와 사용가능, 조절기 별도

- ***Made in Korea*** ■ ***Powder-coated Steel Housing.***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Optional Remote Thermo Controller, K-type Themo-Senser, and Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.***
- ***Heating Mantles for 50ml~6,000ml Flask are with a Device* for Holding a Optional Stainless-steel Rod Φ12.7 mm for Article Support.***

(1) Plain Bottom-type Remotecontrolled Reaction Vessel Heating Mantle

(1) Plain Bottom-type

Vessels, ml Dia. Φ × H(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(cm)	with 230V	with 120V	
100ml, Φ7×H9	80 W	6.5cm	Φ14.5×h11.0	DH.WHM8170	DH.WHM8170.1	
250ml, Φ7×H13	140 W	10.5cm	Φ14.5×h14.0	DH.WHM8171	DH.WHM8171.1	
500ml, Φ11×H12	240 W	9.0cm	Φ19.0×h13.5	DH.WHM8172	DH.WHM8172.1	
1,000ml, Φ11×H20	350 W	14.0cm	Φ19.0×h16.5	DH.WHM8173	DH.WHM8173.1	
2,000ml, Φ13×H24	450 W	16.5cm	Φ19.0×h19.0	DH.WHM8174	DH.WHM8174.1	
2,000ml, Φ14×H27	550 W	20.5cm	Φ20.6×h22.0	DH.WHM8175	DH.WHM8175.1	
3,000ml, Φ13×H32	550 W	26.5cm	Φ19.0×h29.0	DH.WHM8176	DH.WHM8176.1	
4,000ml, Φ20×H29	800 W	21.0cm	Φ27.0×h22.5	DH.WHM8178	DH.WHM8178.1	
5,000ml, Φ20×H29	800 W	21.0cm	Φ27.0×h22.5			
6,000ml, Φ21.5×H32	800 W	24.5cm	Φ32.5×h23.5	DH.WHM8179	DH.WHM8179.1	
10Lit, Φ21.5×H45	1400 W	32.0cm	Φ32.5×h35.0	DH.WHM8180	DH.WHM8180.1	
10Lit, Φ24×H41	1400 W	32.0cm	Φ32.5×h35.0	DH.WHM8181	DH.WHM8181.1	
20Lit, Φ25×H47	2000 W	40.0cm	Φ40.0×h45.0	DH.WHM8182	DH.WHM8182.1	
20Lit, Φ27×H45	2000 W	35.0cm	Φ40.0×h40.0	DH.WHM8183	DH.WHM8183.1	
20Lit, Φ29×H42	2000 W	35.0cm	Φ40.0×h40.0	DH.WHM8184	DH.WHM8184.1	
50Lit, Φ31.5×H81	4000 W	70.0cm	Φ44.0×h75.0	DH.WHM8185	DH.WHM8185.1	
100Lit, Φ41.5×H91	6000 W	75.5cm	Φ55.0×h83.0	DH.WHM8186	DH.WHM8186.1	

(2) Bottom Outlet-type Remotecontrolled Reaction Vessel Heating Mantle

(2) Bottom Outlet-type / with Bottom Drain Valve PTFE

∗ Bottom Outlet Hole Size : L7.2×W4.0cm(500~2,000ml) or L12.0×W7.0cm(3,000ml~100Lit)

Vessels, ml Dia. Φ × H(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside Φ × h(cm)	with 230V	with 120V	
500ml, Φ11×H12	240 W	8.5cm	Φ19.0×h11.0	DH.WHM8190	DH.WHM8190.1	
1,000ml, Φ11×H20	350 W	14.0cm	Φ19.0×h16.5	DH.WHM8191	DH.WHM8191.1	
2,000ml, Φ13×H24	450 W	16.5cm	Φ19.0×h19.0	DH.WHM8192	DH.WHM8192.1	
2,000ml, Φ14×H27	550 W	16.5cm	Φ20.6×h22.0	DH.WHM8193	DH.WHM8193.1	
3,000ml, Φ13×H32	550 W	26.5cm	Φ19.0×h29.0	DH.WHM8194	DH.WHM8194.1	
4,000ml, Φ20×H29	800 W	21.0cm	Φ27.0×h22.5	DH.WHM8196	DH.WHM8196.1	
5,000ml, Φ20×H29	800 W	21.0cm	Φ27.0×h22.5			
6,000ml, Φ21.5×H32	800 W	24.5cm	Φ32.5×h23.5	DH.WHM8197	DH.WHM8197.1	
10Lit, Φ21.5×H45	1400 W	31.0cm	Φ32.5×h35.0	DH.WHM8198	DH.WHM8198.1	
10Lit, Φ24×H41	1400 W	31.0cm	Φ32.5×h35.0	DH.WHM8199	DH.WHM8199.1	
20Lit, Φ25×H47	2000 W	41.0cm	Φ40.0×h45.0	DH.WHM8200	DH.WHM8200.1	
20Lit, Φ27×H45	2000 W	35.0cm	Φ40.0×h40.0	DH.WHM8201	DH.WHM8201.1	
20Lit, Φ29×H42	2000 W	35.0cm	Φ40.0×h40.0	DH.WHM8202	DH.WHM8202.1	
50Lit, Φ31.5×H81	4000 W	70.0cm	Φ44.0×h75.0	DH.WHM8203	DH.WHM8203.1	
100Lit, Φ41.5×H91	6000 W	78.0cm	Φ55.0×h83.0	DH.WHM8204	DH.WHM8204.1	

<Ex.>
Heating Mantle Set with Temp. Probe and the Digital Feedback Temp. Controller "WHM - C10D"

(3) Stand Rod, "RD300", Φ12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

Optional Remote Controller

	Cat. No		Ea. Price, ₩
	with 230V	with 120V	
(a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW	DH.WHM13500	DH.WHM23500	
(b) Digital Remote Controller, Ambient +5 ~ 700℃, ±1℃ Uniformity at Set Temp.	DH.WHM12500	DH.WHM22500	

Optional Temp. Probe & Stand Rod, Holder, Clamp for Digital Temp. Remote Controller

		Ea. Price, ₩
DH.WHP503040	Direct Contact Temp. Probe, K-type, **"SS300"**, L250×Φ 4.8 mm	
DH.WHP503050	, **"SS400"**, L380×Φ 4.8 mm	
DH.WHP503041	Direct Contact Temp. Probe, K-type, **"SS310"**, Teflon Coated, L250×Φ5 mm	
DH.WHP503051	Direct Contact Temp. Probe, K-type, **"SS410"**, Teflon Coated, L380×Φ5 mm	
DH.WHP503037	(3) Stand Rod, Φ12.7×L520mm, **"RD300",** for Heating Mantles	
DH.WHP503012	(4) Holder / Clamp / Clip, **"CL220",** for Temp. Sensor	

Articles	Cat. No	Description

DAIHAN® Analog Aluminum-case Multi Heating Mantle, with 3 & 6 Places, 450℃, with Certi. & Traceability

With Glassware Supporting Rod & Clamp, Ideal for Extraction · Reflux · Distillation Applications, Lower Profile, 250~1,000㎖

3 & 6구 멀티 히팅맨틀, 추출/증류용에 적합, 조절기 내장

- ***Made in Korea***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Lower Profile for Space-saving Convenience***
- ***Ideal for Repetitive Extraction (Kjeldahl, Soxhlet and other Extraction Procedure), Reflux and Distillation Laboratory Applications***
- ***Analog Controller Built-in System***
- ***Rods and Clamps for Rods Connection***
- ***Ideal for DURAN / Kimax / Pyrex & Iwaki-brand Round Flasks***
- ***Highly-processed Aluminum Case Offers Robust Standing, Easy Handling***
- ***Nickel Chrome Heating Element - Coil Type : Acid-Resistant, Long Life Time***
- ***without Clamp & Clamp Holder for Glassware ; Order Separately***

(1) Analog 6 places Heating Mantle (WHM12293)

Premium Analog Multi Heating Mantle

Highly-processed Aluminum Case
Nickel Chrome Heating Element

(2) Analog 3 places Heating Mantle (WHM12391)

(1) 6 places Analog Multi Heating Mantle, 250㎖, 300㎖ & 500㎖, 450℃

Catalog No.		Flask Capacity (ml)	Flask		Watts(W)	Inside Depth (mm)	Dimension W×D×H (mm)	Ea. Price, ₩
with 230V	with 120V		Max. Dia. Φ (mm)	Bottom				
DH.WHM12291	DH.WHM12292	250/300	83 ~ 86	Flat	840	50	800×240×110	
DH.WHM12293	DH.WHM12294	250/300	83 ~ 86	Round	840	50	800×240×110	
DH.WHM12295	DH.WHM12296	500	102 ~ 105	Round	1440	65	950×270×130	

(2) 3 places Analog Multi Heating Mantle, 500㎖ & 1,000㎖, 450℃

Catalog No.		Flask Capacity (ml)	Flask		Watts(W)	Inside Depth (mm)	Dimension W×D×H (mm)	Ea. Price, ₩
with 230V	with 120V		Max. Dia. Φ (mm)	Bottom				
DH.WHM12391	DH.WHM12392	500	102 ~ 105	Round	720	65	550×270×130	
DH.WHM12393	DH.WHM12394	1,000	130 ~ 133	Round	1050	75	690×340×170	

※ Remarks : DU. : DURAN Ki. : Kimax Iw. : Iwaki Py. : Pyrex

Spare Support Rod & Clamp Set

		Ea. Price, ₩
DH.WHM30500	Support Rod & Clamp Set, **"MHR01",** for 3Places 500ml, 2×750-/1×500-mm Rod and 2×Clamp for Rod	
DH.WHM31000	, **"MHR02",** for 3Places 1000ml, 2×750-/1×600-mm Rod and 2×Clamp for Rod	
DH.WHM60250	, **"MHR03",** for 6Places 250-/300-ml, 2×750-/1×900-mm Rod and 2×Clamp for Rod	
DH.WHM60500	, **"MHR04",** for 6Places 500ml, 2×750-/1×940-mm Rod and 2×Clamp for Rod	

DAIHAN® Heating Tape "WHM", Standard-type, 250℃, 13 & 25mm

Heating Tape
∗ For Glass Tubes Metal Pipet

Catalog No.	13mm Width × Length(m)	Watts & Volt	Ea. Price, ₩
DH.WHM12311	13mm × 0.6m	200W, 230V	
DH.WHM12312	× 1.0m	200W, 230V	
DH.WHM12313	× 1.5m	250W, 230V	
DH.WHM12314	× 2.0m	300W, 230V	
DH.WHM12315	× 2.5m	350W, 230V	
DH.WHM12316	× 3.0m	400W, 230V	

Catalog No.	25mm Width × Length(m)	Watts & Volt	Ea. Price, ₩
DH.WHM12321	25mm × 0.6m	200W, 230V	
DH.WHM12322	× 1.0m	200W, 230V	
DH.WHM12323	× 1.5m	250W, 230V	
DH.WHM12324	× 2.0m	300W, 230V	
DH.WHM12325	× 2.5m	350W, 230V	
DH.WHM12326	× 3.0m	400W, 230V	
DH.WHM12327	× 4.0m	550W, 230V	
DH.WHM12328	× 6.0m	700W, 230V	

DAIHAN® Custom-Made Heating Mantle & Insulation, Up to 450℃~650℃

Ideal for Bottom Valved Vessels or General-use, "WHM", 고객 주문 사양 히팅맨틀 및 단열/보온재

We can Offer DAIHAN Custom Heating Mantle, for which you can Specify the Outside Diameter of the Vessel, Length of Mantle, Voltage, Number of Circuits and Length of Each Heating Zone, Ambient Temperature, Unusual Ambient Conditions, Size & Location of Holes for View Ports, and Tubulations.

Please Submit a Sketch for Complicated Applications and Contact our International Sales Team or our Distributor in your Country.
- Provides Uniform Heating and Insulation for Scrubbing and Fractionating Columns.
- Closes with a Zipper, with Eyelets and laces or Hooks and laces.
- Internal Operating Temperature is up to 450℃ or 650℃

Examples for Customized Heating Mantle

Welcome! Custom-Made Heating Mantle!!

Articles	Cat. No	Description

DAIHAN® Analog Compact Temp Controller "WHM-C10A", up to 1.2kW, for All-Purpose Heating Instruments With Solid State, Proportional Voltage Power Control (5~100%), 아날로그 온도 조절기

■ *Made in Korea* ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*

Analog Compact Temp. Controller "WHM-C10A"

<Ex.>
Heating Mantle Set with the Analog Compact Temp. Controller "WHM-C10A"

■ *PL (Product Liability) Insurance*
■ ***Small Footprint, Compact Analog Temperature Controller***
■ ***Precise Manual Control of Heating Mantles, Tapes, Cords and Other Resistive Loads up to 1.2 kW***
∗ Safe and Durable Design
∗ Solid state, Proportional Voltage Power Control (5~100% or Rated Voltage)

Specifications & Ordering information

Spec. \ Model		"WHM-C10A"
Control Range & Capacity		5~100% of Rated Voltage, Up to 1.2 kW
Dimension & Weight		95×98×h106mm, 1 kg
Packing Size & Gross Weight		190×160×h130mm, 2 kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz
Cat. No.	230V	DH.WHM13500
	120V	DH.WHM23500
Price, Each. ₩		

∗ Other Specifications are available upon Customer's Request.

DAIHAN® Digital Feedback Temp Controller "WHM-C10D", up to 700℃, ±0.1℃, with Back-Light LCD For All-purpose Heating Instruments, Available K-type External Direct Contact Thermocouple(Optional), 디지털 온도 조절기

■ *Made in Korea* ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*

Digital Feedback Temp. Controller "WHM-C10D"

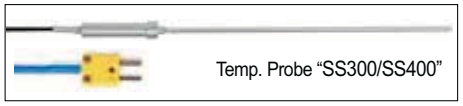
<Ex.>
Heating Mantle Set with Temp. Probe and the Digital Feedback Temp. Controller "WHM-C10D"

■ *PL (Product Liability) Insurance*
■ ***User's Self-compensation Function to Control Difference between Real Temp. and Indicated Temp. (±50℃)***
■ ***Patented Jog-Shuttle Control System***
∗ Digital Feedback Control by High-Performance Microprocessor
∗ Digital LCD with Back-Light Function ∗ Small Footprint and User-Friendly Design.
∗ Storage function, Timer, Alarm & Locking Mode
∗ Heating Instruments can be controlled up to 2kW.
∗ Accurate Temp. Control of the Liquid in the Vessel using Optional Direct K-type Sensor

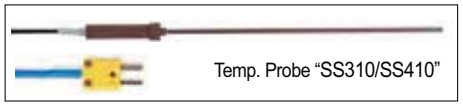
Specifications & Ordering information

Spec. \ Model		"WHM-C10D"
Temp. Range & Accuracy		Ambient +5 ~ 700℃, ±1℃ at Set Temperature
Temp. Resolution		1℃-Display, 1℃-Control
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end
Display		Digital LCD with Back Light Function (Temp., Timer)
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)
Control Capacity		up to 2 kW for 230V, 1.5kw for 120V
Dimension & Weight		145×185×h68mm, 2.8 kg
Packing Size & Gross Weight		280×250×h110mm, 4 kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz
Cat. No.	230V	DH.WHM12500
	120V	DH.WHM22500
Price, Each. ₩		

∗ Other Specifications are available upon Customer's Request.



(1) External/Direct Contact Temp. Probe



(2) External/Direct Contact Temp. Probe, Teflon Coated

(3) Stand Rod, "RD300", Φ12.7×L520mm
(4) Holder / Clamp / Clip for Temp. Probe

Optional Temp. Probe & Stand Rod, Holder, Clamp

		Ea. Price, ₩
DH.WHP503040	(1) Direct Contact Temp. Probe, K-type, **"SS300"**, L250×Φ 4.8 mm	
DH.WHP503050	(1) Direct Contact Temp. Probe, K-type, **"SS400"**, L380×Φ 4.8 mm	
DH.WHP503041	(2) Direct Contact Temp. Probe, K-type, **"SS310"**, Teflon Coated, L250×Φ5 mm	
DH.WHP503051	(2) Direct Contact Temp. Probe, K-type, **"SS410"**, Teflon Coated, L380×Φ5 mm	
DH.WHP503037	(3) Stand Rod, Φ12.7×L520mm, **"RD300"**, for Heating Mantles	
DH.WHP503012	(4) Holder & Clamp, **"CL220"**, for Temp. Sensor	

DAIHAN Scientific

Homogenizer

Homogenizer, with Direct Controller ····· P. 96
, with Remote Digital Controller ····· P. 97
, Accessory ····· P. 98
Homogenizing Stirrer for Tissue Grinder ····· P. 99
Homogenizing Tissue Grinder ····· P. 99

Homogenizer
with Direct Controller
"HG-15A"
27,000 rpm

Digital Homogenizer
with Remote Controller
"HG-15D"
2,000~27,000 rpm

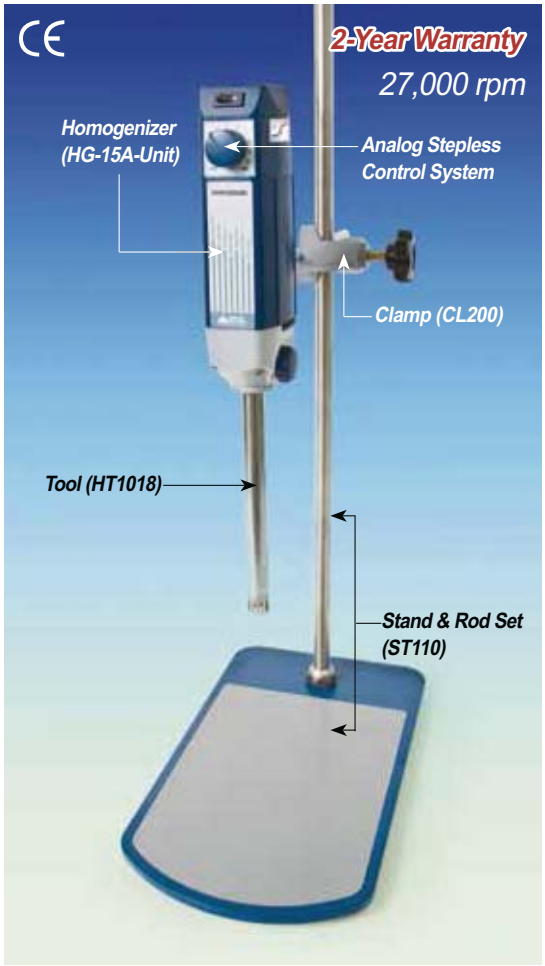
Homogenizing Stirrer
for Tissue Grinder
"HS-30E"
200~5,000 rpm

Articles	Cat. No	Description

DAIHAN® Homogenizer with Direct Controller "HG-15A", up to 27,000 rpm, 1~2,500㎖

With Analog Stepless Control System, High Efficiency Dispersing Tools, High-Speed · High-Quality · Low Noise

균질기 / 호모게나이저, 아날로그 컨트롤러 내장, 초고속/저소음 모터



A. Homogenizer Package-set "HG-15A-Set-A"

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Useful for All Dispersing and Homogenizing Applications***
- ■ ***Over Heat Protection***

∗ Designed for Liquid and Tissue Samples
∗ Useful for All Dispersing and Homogenizing Applications
∗ High Speed / High Quality / Low Noise : Max. 27,000 RPM (without load)
∗ Speed & Power Control Optimized for a Sample
∗ High Efficiency Dispersing Tool made of Stainless-steel and PTFE

Specifications & Ordering information

Spec. \ Model		A. "HG-15A-Set-A" with HT1018	B. "HG-15A-Set-B" with HT1025	C. "HG-15A" (Unit Only)
Speed Range & Adjustment		Max. 27,000 rpm (without load), Stepless		
Working Range		1 ~ 2,500ml		
Motor Rating (Input / Output)		Input : 300W, Output : 160 W		
Controller		Analog Phase Controller		
Standard Component Acc.		"**HT1018**" Dispersing Tool, "**CL200**" Clamp, "**ST110**" Stand	"**HT1025**" Dispersing Tool, "**CL200**" Clamp, "**ST110**" Stand	Unit Only
Safety Device		Over Heat Protector		
Usable Dispersing Tool		Φ8mm Stator "**HT1008**", Φ10mm Stator "**HT1010**", Φ18mm Stator "**HT1018**", Φ25mm Stator "**HT1025**"		
Material		Aluminum Die-casting and ABS-Unit, Stainless-steel (#304)-Tool		
Permissible Temp. & Moisture		Ambient +5 ~ 50℃, 85%		
Extension Arm Size		Φ12.7×L250mm		
Dimension & Weight		60×75×h215mm, 2.5kg		
Packing Size & Gross Weight		320×300×h190mm, 5 kg		
Power Consumption		160W		
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WHG02016	DH.WHG02017	DH.WHG02015
	120V	DH.WHG01016	DH.WHG01017	DH.WHG01015
Price, Each. ₩				

∗ **Other Specifications are available upon Customer's Request.**

(1) Dispersing Tool "HT1008"

(2) Dispersing Tool "HT1010"

(3) Dispersing Tool "HT1018"

(4) Dispersing Tool "HT1025"

Spare Dispersing Tool & Clamp & Plate Stand

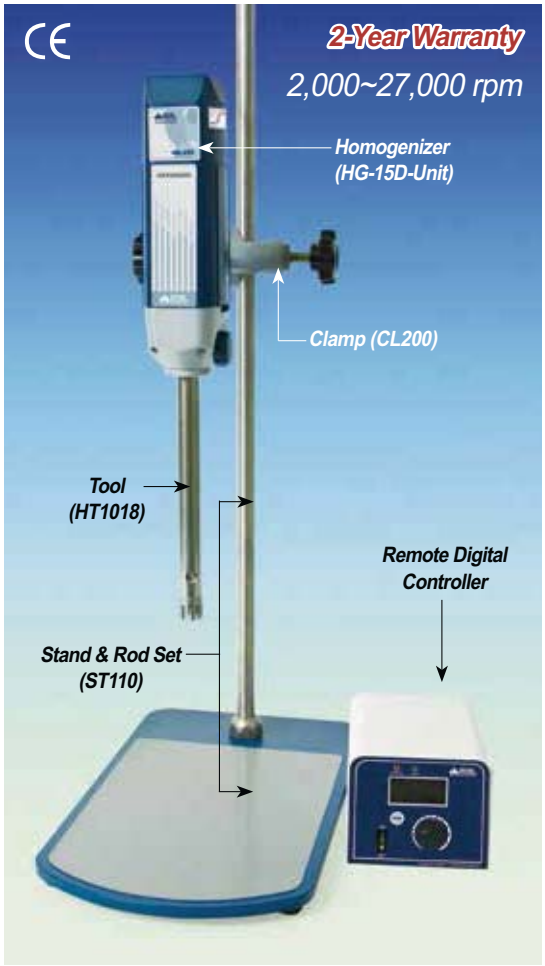
		Ea. Price, ₩
DH.WHG02108	(1) Dispersing Tool, **"HT1008"**, Rotor Φ6, Stator Φ8mm , 1~50ml	
DH.WHG02110	(2) Dispersing Tool, **"HT1010"**, Rotor Φ7.96, Stator Φ10mm, 1~100ml	
DH.WHG02118	(3) Dispersing Tool, **"HT1018"**, Rotor Φ12.8, Stator Φ18mm, 10~1000ml	
DH.WHG02125	(4) Dispersing Tool, **"HT1025"**, Rotor Φ20 , Stator Φ25mm, 50~2500ml	
SL.Cla8011	Clamp, **"CL200"**, for Stirrer or Homogenizer, Cast Aluminum, Grip Capacity Φ23mm for Stand/Rod	
DH.WOS501510	Standard Plate Stand, **"ST110"**, for Stirrer or Homogenizer, Φ16×h800 mm Rod, w20×d35 cm Plate, with Silicone Pad	
DH.WOS501515	Wide Plate Stand, **"ST120"**, for Stirrer or Homogenizer, Φ23×h1000 mm Rod, w30×d40 cm Plate, with Silicone Pad	

※ **See page 98 for the Specifications of Dispersing Tools and Accessories.**

DAIHAN® Homogenizer with Remote Digital Controller "HG-15D", 2,000~27,000rpm

With Microprocessor Control, High-Efficiency Dispersing Tools, Back Light LCD, 1~2,500㎖

디지털 균질기 / 호모게나이저, 분리형 리모트 컨트롤러, 초고속/저소음 모터



A. Homogenizer with Remote Digital Controller "HG-15D-Set-A"

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Patented Jog-Shuttle Control System***

* Useful for All Dispersing and Homogenizing Applications
* Designed for Liquid and Tissue Samples
* High Speed / High Quality / Low Noise : Max. 27,000 RPM (without load)
* Remote Digital Controller : Fully Digital Controlled by Using Microprocessor
* Speed & Power Control Optimized for a Sample
* LCD of Speed(RPM) and Power Bar Graph
* High Efficiency Dispersing Tool made of Stainless-steel and PTFE

Specifications & Ordering information

Spec. \ Model	A. "HG-15D-Set-A" with HT1018	B. "HG-15D-Set-B" with HT1025	C. "HG-15D" (Unit Only)
Speed Range & Resolution	2,000 ~ 27,000rpm (without load), 10 rpm-Control		
Working Range	1 ~ 2,500ml		
Motor Rating (Input / Output)	Input : 300W, Output : 160 W		
Timer & Alarm	10sec ~ 15min, Timer-end Alarm		
Display	Digital LCD with Back-Light Function		
Controller	Digital Feedback Controller (Remote Type)		
Standard Component Acc.	"**HT1018**" Dispersing Tool, "**CL200**" Clamp, "**ST110**" Stand	"**HT1025**" Dispersing Tool, "**CL200**" Clamp, "**ST110**" Stand	Unit Only
Safety Device	Over Load & Over Heat Protector		
Usable Dispersing Tool	Φ8mm Stator "**HT1008**", Φ10mm Stator "**HT1010**", Φ18mm Stator "**HT1018**", Φ25mm Stator "**HT1025**"		
Material	Aluminum Die-casting and ABS-Unit, Stainless-steel (#304)-Tool		
Permissible Temp. & Moisture	Ambient +5 ~ 50℃, 85%		
Extension Arm Size	Φ12.7×L250mm		
Dimension & Weight	60×75×h215mm, 2.5kg		
Packing Size & Gross Weight	580×340×h230mm, 6 kg		
Power Consumption	160W		
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No. 230V	DH.WHG02019	DH.WHG02020	DH.WHG02018
Cat. No. 120V	DH.WHG01019	DH.WHG01020	DH.WHG01018
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

(1) Dispersing Tool "HT1008"

(2) Dispersing Tool "HT1010"

(3) Dispersing Tool "HT1018"

(4) Dispersing Tool "HT1025"

Spare Dispersing Tool & Clamp & Plate Stand

		Ea. Price, ₩
DH.WHG02108	(1) Dispersing Tool, **"HT1008"**, Rotor Φ6, Stator Φ8mm , 1~50ml	
DH.WHG02110	(2) Dispersing Tool, **"HT1010"**, Rotor Φ7.96, Stator Φ10mm, 1~100ml	
DH.WHG02118	(3) Dispersing Tool, **"HT1018"**, Rotor Φ12.8, Stator Φ18mm, 10~1000ml	
DH.WHG02125	(4) Dispersing Tool, **"HT1025"**, Rotor Φ20 , Stator Φ25mm, 50~2500ml	
SL.Cla8011	Clamp, **"CL200"**, for Stirrer or Homogenizer, Cast Aluminum, Grip Capacity Φ23mm for Stand/Rod	
DH.WOS501510	Standard Plate Stand, **"ST110"**, for Stirrer or Homogenizer, Φ16×h800 mm Rod, w20×d35 cm Plate, with Silicone Pad	
DH.WOS501515	Wide Plate Stand, **"ST120"**, for Stirrer or Homogenizer, Φ23×h1000 mm Rod, w30×d40 cm Plate, with Silicone Pad	

※ See page 98 for the Specifications of Dispersing Tools and Accessories.

Articles	Cat. No	Description

① Dispersing Tool "HT1008"

② Dispersing Tool "HT1010"

③ Dispersing Tool "HT1018"

④ Dispersing Tool "HT1025"

⑤ High Quality Clamp (CL200)

⑥ Standard Plate Stand (ST110)

⑦ Wide Plate Stand (ST120)

Homogenizer Accessory, Dispersing Tool & Plate Stand

(1) Dispersing Tool

- ***Accurate Stator & Rotor made of Stainless-steel***
- ***High Efficiency Dispersing Tool made of Stainless-steel and PTFE***
- ***Low Cost & High Efficiency***

Model	① "HT1008"	② "HT1010"	③ "HT1018"	④ "HT1025"
Working Range	1 ~ 50ml	1 ~ 100ml	10 ~ 1,000ml	50 ~ 2,500ml
Stator Diameter	Φ8 mm	Φ10 mm	Φ18 mm	Φ25 mm
Rotor Diameter	Φ6 mm	Φ7.96 mm	Φ12.8mm	Φ20 mm
Gap between Rotor & Stator	0.25 mm	0.2 mm	0.25 mm	0.35 mm
Allowable Max. Speed	27,000 rpm		20,000 rpm	15,000 rpm
Immersion Depth Min.	35 mm		60 mm	
Immersion Depth Max	70 mm		130 mm	
Shaft Length	138 mm		225 mm	
Bearing Material	PTFE			
Suitable for Solvent	Yes			
Max. Temperature	180℃			
Sterilization Method	All Methods			
Suspensions & Emulsions	Suspension : 10 ~ 50㎛, Emulsion : 1 ~ 10㎛			

*** Test Condition : 1.8 liters of water in the 2 liters capacity beaker.**

Ea. Price, ₩

DH.WHG02108 ① Dispersing Tool, **"HT1008"**
DH.WHG02110 ② , **"HT1010"**
DH.WHG02118 ③ , **"HT1018"**
DH.WHG02125 ④ , **"HT1025"**

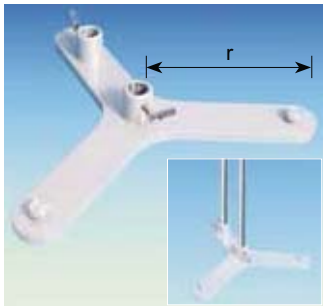
(2) Clamp & Plate Stand

Ea. Price, ₩

SL.Cla8011 ⑤ Clamp, **"CL200"**, for Stirrer or Homogenizer, L135mm, Cast Aluminum, Grip Capacity Φ23mm for Stand/Rod

DH.WOS501510 ⑥ Standard Plate Stand, **"ST110"**, for Stirrer or Homogenizer, Φ16×h800 mm Rod, w20×d35 cm Plate, with Silicone Pad

DH.WOS501515 ⑦ Wide Plate Stand, **"ST120"**, for Stirrer or Homogenizer, Φ23×h1000 mm Rod, w30×d40 cm Plate, with Silicone Pad



Steel Retort Base Duo Stand, up to Φ16mm Rods, for 2 Rods

With Hinged Screw M6, Nonskid Feet equipped, Rod Excluded

∗ Can Fix Rods up to 2ea (Below Φ16mm) ∗ Stand Thickness : 8mm

Retort Stand, Only Stand Base

∗ Supplied by Usbeck® in Germany

Ea. Price, ₩

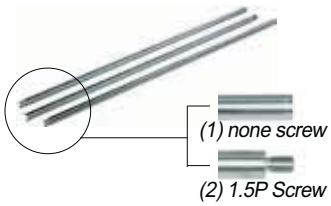
US.2040 Stand, **"US2040"**, r =150mm
US.2041 , **"US2041"**, r =185mm

Optional Stainless-steel Rod

Ea. Price, ₩

DH.WOS502001 Stainless-steel Rod, **"RD501"**, Φ16×h800mm , Non-screw
DH.WOS502002 , **"RD502"**, Φ16×h1000mm, Non-screw
DH.WOS502003 , **"RD503"**, Φ16×h1200mm, Non-screw

DAIHAN® High-Quality Stainless-steel (#304) Rod. for Plate Stand, Φ16/23 mm



Stainless-steel Rod

(1) Plain-type Φ16mm Rod, without Screw

Ea. Price, ₩

DH.WOS502001 Stainless-steel Rod, **"RD501"**, Φ16×h800mm , Non-screw
DH.WOS502002 , **"RD502"**, Φ16×h1000mm, Non-screw
DH.WOS502003 , **"RD503"**, Φ16×h1200mm, Non-screw
DH.WOS502031 , **"RD531"**, Φ23×h800mm , Non-screw
DH.WOS502033 , **"RD533"**, Φ23×h1200mm, Non-screw

(2) 1.5P Screw-type Φ16 & 23mm Rod

Ea. Price, ₩

DH.WOS502011 Stainless-steel Rod, **"RD511"**, Φ16×h800mm , 1.5P Screw
DH.WOS502012 , **"RD512"**, Φ16×h1000mm, 1.5P Screw
DH.WOS502013 , **"RD513"**, Φ16×h1200mm, 1.5P Screw
DH.WOS502021 , **"RD521"**, Φ23×h800mm , 1.5P Screw
DH.WOS502022 , **"RD522"**, Φ23×h1000mm, 1.5P Screw
DH.WOS502023 , **"RD523"**, Φ23×h1200mm, 1.5P Screw

DAIHAN® Homogenizing Stirrer "HS-30E", for Tissue Grinder, 200~5,000rpm
Analog Phase Control, without Tissue Grinder, with Certi. & Traceability, 호모게나이저 스터러

Homogenizing Stirrer Package-Set "HS-30E"

- ***Made in Korea*** ***CE Certified*** ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for usage with Tissue Grinders***

∗ Designed for most Laboratory Applications such as Homogenizing or Mixing
∗ Compact Unit with Solid State Speed Control

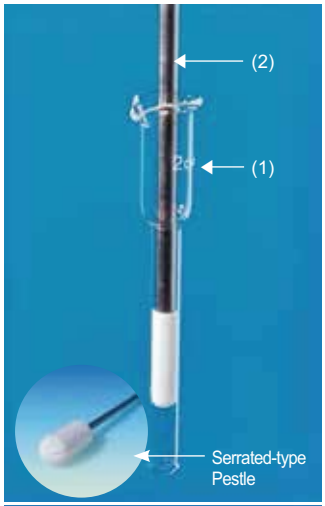
Specifications & Ordering information

Spec. \ Model		"HS-30E"
Speed Range & Max. Torque		200 ~ 5,000 rpm, 85 Ncm
Stirring Capacity		Max. 10 Lit
Motor Rating		Input : 83 W, Output : 75 W, 1/10 HP
Safety Device		Over Heat Protector
Controller		Analog Phase Controller
Dimension & Weight		90×145×h180mm, 3.5 kg
Packing Size & Gross Weight		320×300×h190mm, 5 kg
Power Consumption		75W
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz
Cat. No.	230V	DH.WOS01010
	120V	DH.WOS02010
Price, Each. ₩		
Component of Package-set		included "CL200" Clamp and "ST110" Stand-set(Rod, Plate)
Cat. No.	230V	DH.WOS01011
	120V	DH.WOS02011
Price, Each. ₩		

∗ Other Specifications are available upon Customer's Request.

※ *Note!* The Package does not Include a Tissue Grinder

Cowie® Tissue Grinder, with PTFE Pestle Head · Borosilicate Glass Mortar, 2~50㎖, Separately
Good for Chemical/Heat Resistance, Standard- / Serrated-type PTFE Head Pestles, STS Pestle Rod is Perfect for Motor Drive, 티슈 그라인더



(3) Serrated-type Pestle

- ***Supplied by Cowie® in U.K***

∗ Use for the Controlled Reduction of Particle Size and Homogenisation for a Variety of Substances, especially Biological Material.
∗ The pestle head is pure PTFE and pestle rod Stainless-steel, Φ 6.5mm
∗ Pestle Length : 230~270mm ∗ The Mortar is precision borosilicate glass.

(1) Glass Mortar, Borosilicate, 2~50㎖

		Ea. Price, ₩
CW.011.102	Mortar, 2㎖ , Φ8×L120mm	
CW.011.105	, 5㎖ , Φ12×L135mm	
CW.011.110	, 10㎖, Φ15×L150mm	
CW.011.115	, 15㎖, Φ19×L155mm	
CW.011.130	, 30㎖, Φ25×L175mm	
CW.011.150	, 50㎖, Φ32×L195mm	

(2) Standard-type Pestle

		Ea. Price, ₩
CW.011.202	Pestle, Standard-type, for 2㎖ , L230mm	
CW.011.205	, for 5㎖ , L235mm	
CW.011.210	, for 10㎖, L270mm	
CW.011.215	, for 15㎖, L270mm	
CW.011.230	, for 30㎖, L270mm	
CW.011.250	, for 50㎖, L270mm	

(3) Serrated-type Pestle

		Ea. Price, ₩
CW.011.302	Pestle, Serrated-type, for 2㎖ , L230mm	
CW.011.305	, for 5㎖ , L235mm	
CW.011.310	, for 10㎖, L270mm	
CW.011.315	, for 15㎖, L270mm	
CW.011.330	, for 30㎖, L270mm	
CW.011.350	, for 50㎖, L270mm	

DAIHAN Scientific

Hotplate & Hotplate Stirrer

Hotplate, 380℃, Analog & Digital ····· P. 103
, 500℃, Solid Ceramic Glass Plate ····· P. 101~102
, 600℃, Hi-Light ***New*** ····· P. 101
, Large Plate, 350℃ ····· P. 104
Hotplate Stirrer, 380℃, Analog & Digital ····· P. 106
, 500℃, Solid Ceramic Glass Plate ····· P. 105
, Systematic Multi-plate, 350℃ ····· P. 107

380℃ Digital Precise Hotplate
"MSH-20D" Package Set

600℃ Hi-Light Hotplate
"HP-D165"

500℃ Hi-temp. Digital Hotplate Stirrer
"MaXtir™ MSH500"

350℃ Large Plate Digital Hotplate
"HPLP-C-P"

Systematic Multi-Hotplate Stirrer
"SMHS-6"

Articles	Cat. No	Description

Wisd 600℃ High-temp Hi-Light Hotplate "HP-D165" & "HP-D200", Digital Control NEW
With Schott NEXTREMA® Ceramic Glass Plate, Hi-Light Heating Element, Φ165 & Φ200mm, 다용도 고온가열판

High-temp. Hi-Light Hotplate, "HP-D165"

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance***
- ***Patented Jog Dial Control System***
- ***Hi-Light Heating Element & Schott NEXTREMA® Ceramic Glass Plate.***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

∗ High Temperature Indication LED Lamp for prevention of Burn.
∗ Can be used with External Temperature Probe.
(Please see "Measuring, Thermomether" Section for Optional External Temp Probes)

Specifications & Ordering Information

Spec. \ Model	"HP-D165" Φ165mm Heating Zone	"HP-D200" Φ200mm Heating Zone
Temp. Range & Accuracy	Max. 600℃ & ±1℃	
Heater & Heating Power	Hi-Light Heating Element 1,100W	Hi-Light Heating Element 1,800W
Plate Size & Heating Zone	220×256 mm, Φ165mm	255×300 mm, Φ200mm
Controller & Display	Digital PID Controller and LED Display	
Material	Plate : Schott NEXTREMA® Ceramic Glass Plate Housing : PBT	
Dimension(w×d×h) & Weight	231×276×h65mm, 3kg	266×311×h65mm, 4kg
Electrical Reqts.	1Phase, AC230V, 50/60Hz	
Cat. No.	DH.HtpD0165	DH.HtpD0200
Price, Each. ₩		

※ **NOTE : Design and Specification can be changed when it's released**

Maximum Convenience by Advanced Digital Technology

DAIHAN® 500℃ High Temp Premium Hotplate, Solid Ceramic Glass Plate

1. High-quality Ceramic Glass Plate

Achieved the maximum temperature of 500℃ by using High-quality Ceramic Glass Plate which can resist up to 700℃
Superior Heat-/Acid/-Chemical-resistant and Easy-to-Clean Plate

2. Hot-top Indicator for User Safety

The Indicator Lamp illuminates while temperature on the Plate Surface is over 50℃ regardless power on/off.
Prevention from a fire or a burn caused by operation at high temperature

3. 2× Independent Internal Temp. Sensor

Two Independent Internal Temp. Sensors: Accurate Temp. Control and Over-temp. Protection.
1xTemp Control Sensor: Achieved Accurate Temp. Control at High Temp.
1xOver-Temp. Protection Sensor: Prevention from malfunction or danger caused by Over-temperature.

4. High-quality Insulation (BTU) for User Safety

High-quality Insulation (BTU) ensures User Safety during operation at High Temperature.
Minimized Heat Transfer from the Plate to the Inside, ensures Long Life-time.

5. External Temp. Sensor

External Temp. Sensor achieves even more Accurate Temp Control by measuring Temp. of Sample. (Optional)

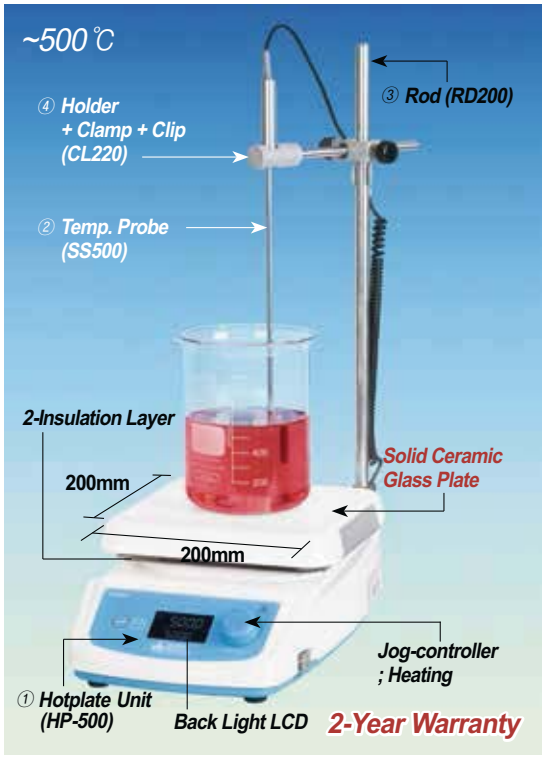
<Continued On Next Page>

Articles	Cat. No	Description

DAIHAN® 500℃ High-Temp Premium Hotplate "MaXtir™ HP500", Solid Ceramic Glass Plate, 200×200mm

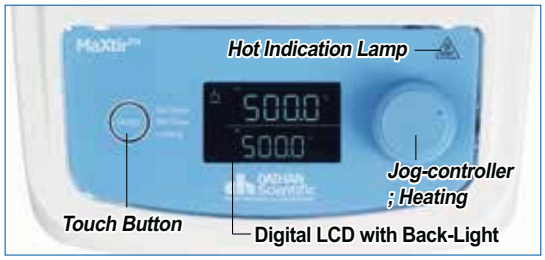
With Large LCD, Optimum Insulation Layer. Accurate Temp Control, Touch-button Controller, Hot-Top Indicator, Max. 500℃, Accu. ±0.3℃

고온용 디지털 가열판, PID 온도 제어, 최적의 방열구조, 내열성/내화학성/내산성 솔리드 세라믹 글라스 플레이트



A. "MaXtir™ HP500" Package-set

B. "MaXtir™ HP500" Unit only



Controller of "MaXtir™ HP500"

- ■ ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean***
- ■ ***Optimum Insulation Fourfold Layers : BTU + Ceramic Paper + 2 SUS Insulation Layer***
- ■ ***Maximum Temperature of 500℃*** ■ ***Ergonomic Design***
- ■ ***Microprocessor PID control***
- ■ ***Patented Controller "Jog-Dial" and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate with Back-Light Function***
- ■ ***2 Internal K-type Temp. Sensor Operating Independently : 1 Temp. Control Sensor for Temperature Accuracy and 1 Over Temp. Detection Sensor for User Safety***
- ■ ***Hot Top Indicator LED Lamp : Hot Surface(Over 50℃) Warning Lamp for User Safety***

∗ Excellent for Sample Drying and most General Lab Heating Applications
∗ User's Self -Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±20.0℃)
∗ Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
∗ Storage Function for the set Values : Temp. and Timer
∗ Minimization of Noise and Improved the Product Life
∗ Use of the Special Advanced Insulation for the safety of the Body Temp.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

Spec. \ Model		A. "MaXtir™ HP500" (Package-set)	B. "MaXtir™ HP500" (Unit Only)
Material	Body	Powder Coated Aluminum	
	Plate	Solid Ceramic Glass Plate, 200×200mm	
Stirring Capa.		Max. 20 Lit	
Temp. Range & Accuracy		Max. 500℃, ±0.3℃ at Set Temperature	
Temp. Resolution		0.1 ℃-Display, 0.5 ℃-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power / Consumption		850W	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.	
Safety Circuit		Over Temp. Protection Hot Top Indicator LED Lamp	
Included Standard Acc.		1ea Stir Bar, ②Temp. Probe ③Rod ④Holder+Clamp	1ea Stir Bar
Permissible Temp. & RH %		Ambient +5 ~ 50℃, 85% RH	
Dimension & Weight		200×332×h114mm, 3.8kg	
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WHP01500	DH.WHP00500
	120V	DH.WHP01501	DH.WHP00501
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

Component of Package-set

∗ Package-set : ① Hotplate Unit ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD200"** Stainless-steel Support Rod Φ12×L450mm ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

(1) Stainless-steel Temp. Probe

(2) Teflon Coated Temp. Probe

(3) Stand Rod "RD200", Stainless-steel

(4) Holder / Clamp / Clip for Temp. Probe

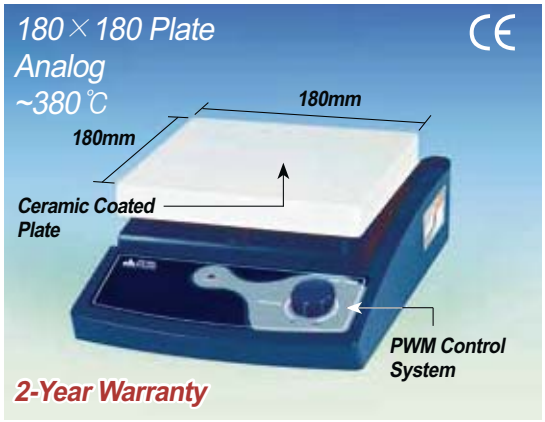
Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503060	(1) External / Direct Contact Temp. Probe, **"SS500"**, Stainless-steel, Φ4×L250mm, Cable L190mm	
DH.WHP503061	(2) External / Direct Contact Temp. Probe, **"SS510"**, **Teflon Coated,** Φ4×L250mm, Cable L190mm	
DH.WHP503036	(3) Stand Rod, **"RD200"**, Stainless-steel, Φ12×L450mm, Screw, for **"MaXtir™ HP500"**	
DH.WHP503012	(4) Holder/Clamp/Clip, **"CL220"**, for Temp. Probe	

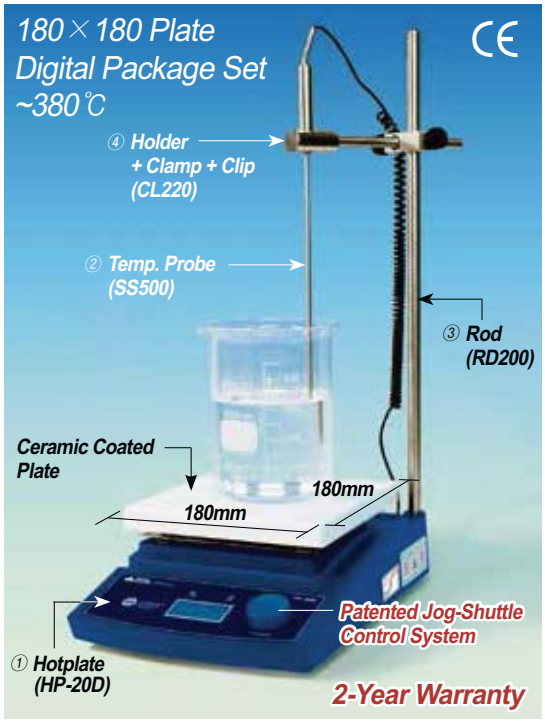
DAIHAN® 380℃ Standard Analog & Digital Hotplate "HP-A" & "HP-D", Ceramic-Coated Plate

With High Temp Uniformity, 180×180- or 260×260-mm Plate, CE Certified, with Certi. & Traceability

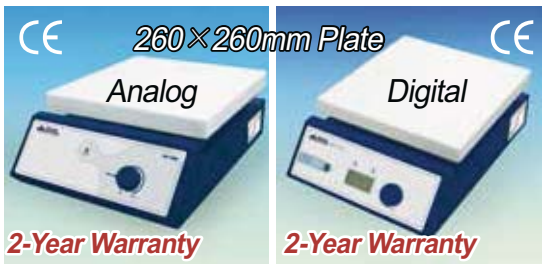
아날로그 & 디지털 정밀 가열판, 우수한 온도균일성 & 경제성, 세라믹 코팅 플레이트



(I-A) Analog "HP-20A", 180×180mm Plate-type



(Ⅲ-A) Digital "HP-20D" Package-set, 180×180mm Plate-type



(I-B) Analog "HP-30A", 260×260mm Plate

(Ⅱ-B) Digital "HP-30D", 260×260mm Plate

■ *Made in Korea* ■ *CE Certified* ■ *PL (Product Liability) Insurance*

■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*

∗ Excellent for Sample Drying and most General Lab Heating Applications

∗ Superior Temperature Uniformity : Less than 10% on the Plate at Ambient Temperature

Ⅰ. Analog Control Hotplate "HP-A"

∗ Superior Linearity for Temperature Control by Specially Designed Control Circuitry (PWM control)

Ⅱ. Digital Control Hotplate "HP-D"

■ *Patented Jog-Shuttle Control System*

∗ Digital Feedback Control by High-Performance Microprocessor

∗ Digital LCD Display with Back-Light Function, 0.1℃-Display, 0.5℃-Control

∗ Temperature Accuracy : ±0.3℃ at Set Temp ∗ Safety Circuit : Over Temp Protection

∗ Timer : 99hr 59min (with Continuous run), Error status & Timer-end Alarm

∗ Locking Mode for Experimental Safety Supported (Input to Jog Shuttle can be disabled)

∗ User's Self-Compensation : to Control Difference between Real Temp & Indicated Temp (±20.0℃)

Ⅲ. Digital Control Hotplate Package-set

∗ **Ⅲ-A. "HP-20D" Set :** Complete with ① Hotplate **"HP-20D"**, ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD200"** Stainless-steel Support Rod Φ12×L450mm, ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

∗ **Ⅲ-B. "HP-30D" Set :** Complete with ① Hotplate **"HP-30D"**, ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD100"** Stainless-steel Support Rod Φ12.7×L390mm, ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

Specifications & Ordering information

Spec. \ Model		A. 180×180mm Plate (I-A) Analog "HP-20A" (Ⅱ-A) Digital "HP-20D"	B. 260×260mm Plate (I-B) Analog "HP-30A" (Ⅱ-B) Digital "HP-30D"
Plate Size(mm)		180×180mm Plate-type	260×260mm Plate-type
Material	Body	Powder Coated Aluminum	Powder Coated steel
	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance, Easy to Clean)	
Temp. Range & Uniformity		Max. 380℃Temp., High Uniformity : Difference 10% less	
Heating Power/Consumption		600 W	1.2 kW
Permissible Temp. & RH %		R/T +5 ~ 50℃, 85% RH	
Dimension & Weight		206×307×h99mm, 2.8kg	286×387×h99mm, 3.3kg
Packing Size & Gross Weight		400×280×h200mm, 5 kg	430×320×200hmm, 5 kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Ⅰ. Analog Unit Only		**(I-A) "HP-20A"**	**(I-B) "HP-30A"**
Cat. No.	230V	DH.WHP03120	DH.WHP03121
	120V	DH.WHP02120	DH.WHP02121
Price, Each. ₩			
Ⅱ. Digital Unit Only		**(Ⅱ-A) "HP-20D"**	**(Ⅱ-B) "HP-30D"**
Cat. No.	230V	DH.WHP03020	DH.WHP03022
	120V	DH.WHP02020	DH.WHP02022
Price, Each. ₩			
Ⅲ. Digital Package-set		**(Ⅲ-A) "HP-20D" Set**	**(Ⅲ-B) "HP-30D" Set**
Cat. No.	230V	DH.WHP03021	DH.WHP03023
	120V	DH.WHP02021	DH.WHP02023
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

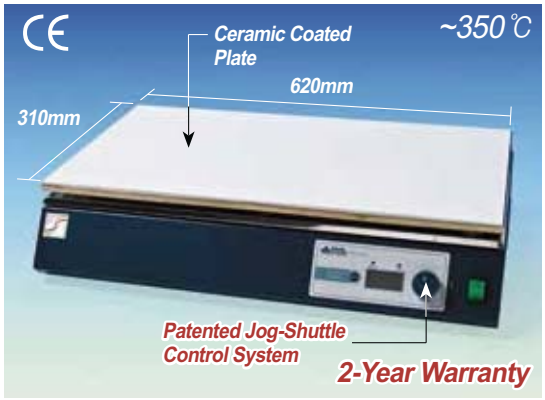
		Ea. Price, ₩
DH.WHP503060	(1) Temp. Probe, **"SS500", "PT100"**, Φ4×L250mm	
DH.WHP503061	(2) **Teflon Coated** Temp. Probe, **"SS510"**, Φ4×L250mm	
DH.WHP503011	Stand Rod, **"RD100"**, Φ12.7×L390 for **"HP-30A / 30D"**	
DH.WHP503036	, **"RD200"**, Φ12×L450 for **"HP-20A / 20D"**	
DH.WHP503012	Holder / Clamp / Clip, **"CL220"**, for Temp. Probe	

Articles	Cat. No	Description

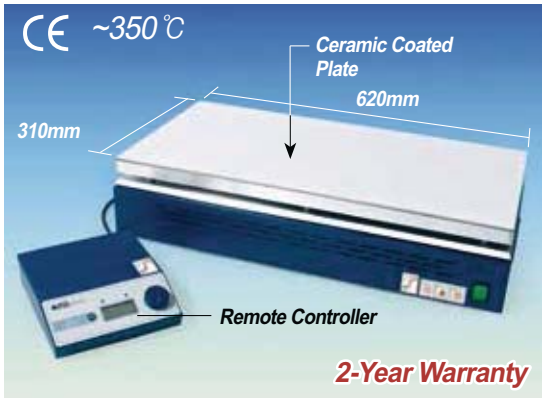
DAIHAN® 350℃ Large Plate Digital Hotplate "HPLP", 310×620mm Ceramic-Coated Plate, Superior Temp Uniformity

Built-in Digital PID Controller or Digital Remote Controller, Back Light LCD, Certificate & Traceability

디지털 대형 정밀 가열판, 디지털 피드백 온도 제어, 디지털 PID 조절기 / 디지털 원격 조절기, 백색 세라믹 코팅판



A. Large Digital Hotplate, with Built-in Digital PID Controller, Ceramic-Coated Plate-type "HPLP-C-P"



B. Large Digital Hotplate, Digital Remote Controller, Ceramic-Coated Plate-type "HPLP-C-R"

- ***Made in Korea*** ***CE Certified***
- ***PL (Product Liability) Insurance***
- ***2-Years Warranty*** ***Max Temp : 350℃***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Superior Temperature Uniformity : Less than 10% on the Plate at Ambient Temperature***
- ***Digital PID Controller***
- ***Patented Jog-Shuttle Control System and Back-Light LCD***

∗ Excellent for Sample Drying and most General lab Heating Applications
∗ Large Heating Area : Ideal for TLC Plate Heating and Surface Heating in Electronic Industries
∗ Superior Temperature Uniformity : Less than 10% on the Plate at Ambient Temperature
∗ Ceramic Coated Plate -Chemical / Acid Prevention

Specifications & Ordering information

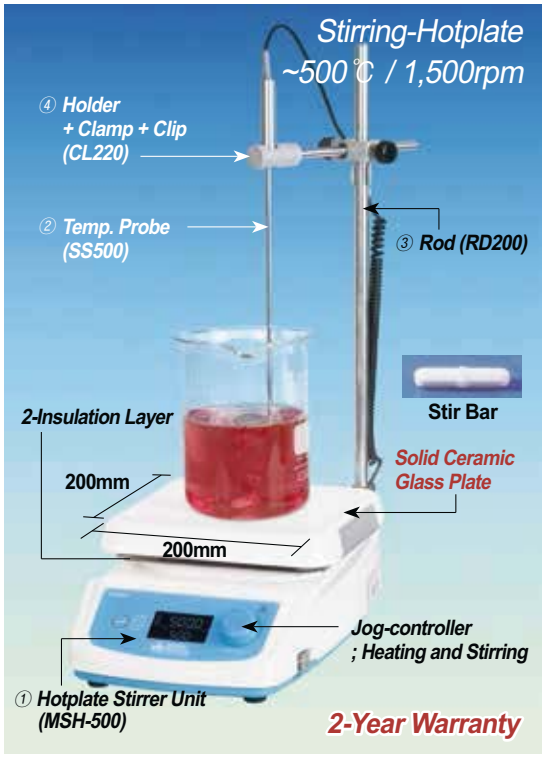
Spec. \ Models		A. "HPLP-C-P" Built-in Controller	B. "HPLP-C-R" Remote Controller
Controller		Built-in Digital PID Controller	Digital Remote Controller
Plate Surface		Ceramic-coated	
Plate Size		310×620mm	
Temp. Range & Accuracy		Max. 350℃, ±0.3℃ at Set Temperature	
Temp. Resolution		0.1 ℃-Display, 0.5 ℃-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		2 kW	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Permissible Temp. & RH %		Ambient +5 ~ 50℃, 85% RH	
Dimension & Weight		670×360×h150mm, 16kg	
Packing Size & Gross Weight		750×430×h220mm, 18 kg	
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WHP03024	DH.WHP03025
	120V	DH.WHP02024	DH.WHP02025
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

DAIHAN® 500℃ High-Temp Premium Hotplate Stirrer "MaXtir™ MSH500", Solid Ceramic Glass Plate, 200×200mm

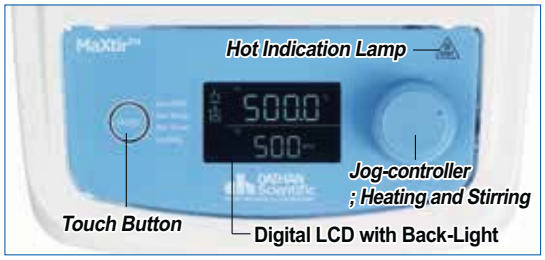
With Large LCD, Optimum Insulation Layer. Accurate Temp Control, Touch-button Controller, Hot-Top Indicator, 80~1,500rpm

고온용 디지털 가열 자력 교반기, 최적의 방열구조, 디지털 피드백 온도 제어, 내열성/내화학성/내산성 솔리드 세라믹 글라스 플레이트



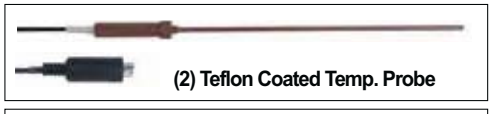
A. "MaXtir™ MSH500" Package-set

B. "MaXtir™ MSH500" Unit only



Controller of "MaXtir™ MSH500" model

(1) Stainless-steel Temp. Probe


(2) Teflon Coated Temp. Probe

(3) Stand Rod "RD200", Stainless-steel

(4) Holder / Clamp / Clip for Temp. Probe

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance*** ■ ***Ergonomic Design***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean***
- ***Optimum Insulation Fourfold Layer : BTU + Ceramic Paper + 2 SUS Insulation Layer***
- ***Brushless Shade Motor & Powerful Magnet ensures Powerful Stirring and Precise Speed Control, Minimization Noise***
- ***Maximum Temperature of 500℃*** ■ ***Microprocessor PID control***
- ***Patented Controller "Jog-Dial" and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate with Back-Light Function***
- ***2 Internal K-type Temp. Sensor Operating Independently : 1 Temp. Control Sensor for Temperature Accuracy and 1 Over Temp. Detection Sensor for User Safety***
- ***Hot Top Indicator LED Lamp : Hot Surface(Over 50℃) Warning Lamp for User Safety***

∗ Excellent for Sample Drying and most General Lab Heating Applications
∗ User's Self -Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±20.0℃)
∗ Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
∗ Storage Function for the set Values : Temp. and Timer
∗ Minimization of Noise and Improved the Product Life
∗ Use of the Special Advanced Insulation for the safety of the Body Temp.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

Spec. \ Model		A. "MaXtir™ MSH500" (Package-set)	B. "MaXtir™ MSH500" (Unit Only)
Material	Body	Powder Coated Aluminum	
	Plate	Solid Ceramic Glass Plate, 200×200mm	
Stirring Capa.		Max. 20 Lit	
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Temp. Range & Accuracy		Max. 500℃, ±0.3℃ at Set Temperature	
Temp. Resolution		0.1 ℃-Display, 0.5 ℃-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power / Consumption		850W	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Safety Circuit		Over Temp. Protection, Hot Top Indicator LED Lamp	
Included Standard Acc.		1ea Stir Bar, ②Temp. Probe ③Rod ④Holder+Clamp	1ea Stir Bar
Permissible Temp. & RH %		Ambient +5 ~ 50℃, 85% RH	
Dimension & Weight		200×332×h114mm, 3.8kg	
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz, with Cord/Plug	
Cat. No.	230V	DH.WMH00500	DH.WMH01500
	120V	DH.WMH00501	DH.WMH01501
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

Component of Package-set

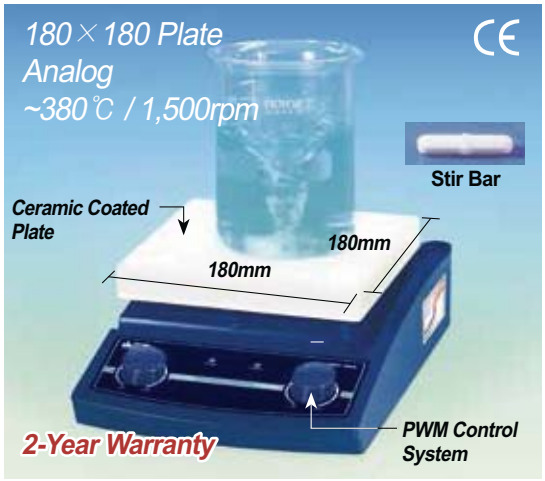
∗ Package-set : ① Hotplate Stirrer Unit ② **"SS500"** PT100 External / Direct Contact Temp. Probe,
③ **"RD200"** Stainless-steel Support Rod Φ12×L450mm
④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

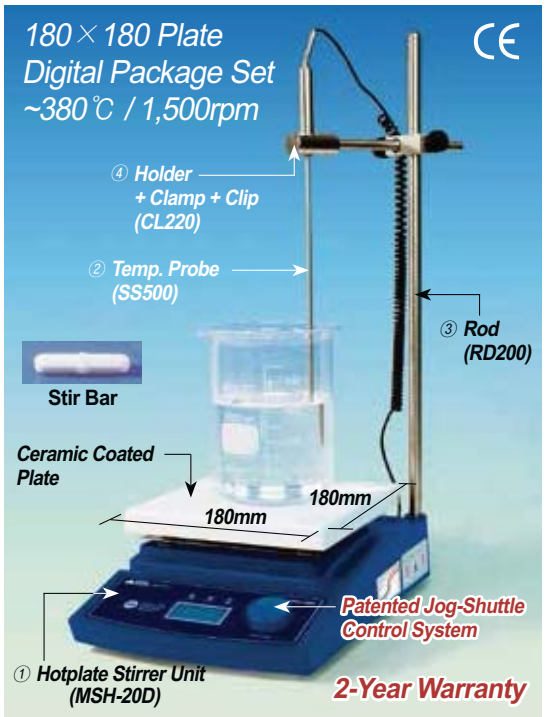
		Ea. Price, ₩
DH.WHP503060	(1) External / Direct Contact Temp. Probe, **"SS500"**, Stainless-steel, Φ4×L250mm, Cable L190mm	
DH.WHP503061	(2) External / Direct Contact Temp. Probe, **"SS510"**, **Teflon Coated**, Φ4×L250mm, Cable L190mm,	
DH.WHP503036	(3) Stand Rod **"RD200"**, Stainless-steel, Φ12×L450mm, 1.5p screw, for **"MaXtir™ MSH500"**	
DH.WHP503012	(4) Holder/Clamp/Clip, **"CL220"**, for Temp. Probe	

Articles	Cat. No	Description

DAIHAN® 380℃ Standard Analog & Digital Hotplate Stirrer "MSH-A" & "MSH-D", Ceramic-Coated Plate, 80~1,500 rpm
180×180mm or 260×260mm Plate, with Accurate Temp Control, Superior Temp. Uniformity, with Certi. & Traceability
아날로그 & 디지털 가열 자력 교반기, 우수한 온도제어/온도균일성, 세라믹 코팅 플레이트



(I-A) Analog "MSH-20A", 180×180mm Plate-type



(Ⅲ-A) Digital "MSH-20D" Package-set, 180×180mm Plate-type

(I-B) Analog "MSH-30A", 260×260mm Plate

(Ⅱ-B) Digital "MSH-30D", 260×260mm Plate

(1) Stainless-steel Temp. Probe

(2) Teflon Coated Temp. Probe

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Excellent for Sample Drying and most General Lab Heating Applications***

Ⅰ. Analog PWM Control System "MSH-A"

∗ Superior Linearity PWM Control for Temperature & Stirring Speed

Ⅱ. Digital Microprocessor Control System "MSH-D"

■ ***Patented Jog-Shuttle Control System***

∗ Speed & Control Resolution : 80 ~ 1,500 rpm, 5 rpm
∗ Temp. Accuracy / Resolution : ±0.3℃ at Set Temp. / 0.1℃-Display, 0.5℃-Control
∗ Timer & Alarm : 99hr 59min(with Continuous run), Error status & Timer-end
∗ Safety Circuit : Over Temp. Protection
∗ User's Self-Compensation : Control Difference between Real Temp. & Indicated Temp. (±20.0℃)
∗ Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor
∗ Storage Function for the set Values : Temp. and Timer
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Ⅲ. Digital Package-set ; Complete with

∗ **Ⅲ-A. "MSH-20D" Set :** ① Hotplate Stirrer **"MSH-20D"**, ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD200"** Stainless-steel Support Rod Φ12×L450mm, ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

∗ **Ⅲ-B. "MSH-30D" Set :** ① Hotplate Stirrer **"MSH-30D"**, ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD100"** Stainless-steel Support Rod Φ12.7×L390mm, ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

Specifications & Ordering information

Spec. \ Model		A. 180×180mm Plate (I-A) Analog "MSH-20A" (Ⅱ-A) Digital "MSH-20D"	B. 260×260mm Plate (I-B) Analog "MSH-30A" (Ⅱ-B) Digital "MSH-30D"
Plate Size(mm)		180×180mm Plate-type	260×260mm Plate-type
Material	Body	Powder Coated Aluminum	Powder Coated steel
	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance, Easy to Clean)	
Stirring Capa. & Motor Rating		Max. 20Lit, 9 / 4W	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		600W	1.2kW
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Permissible Temp. & RH %		Ambient +5 ~ 50℃, 85% RH	
Dimension & Weight		206×307×h99mm, 3.3kg	286×387×h99mm, 3.5kg
Packing Size & Gross Weight		400×280×h200mm, 5kg	430×320×h200mm, 5kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Ⅰ. Analog Unit Only		**(I-A) "MSH-20A"**	**(I-B) "MSH-30A"**
Cat. No.	230V	DH.WMH03120	DH.WMH03121
	120V	DH.WMH02120	DH.WMH02121
Price, Each. ₩			
Ⅱ. Digital Unit Only		**(Ⅱ-A) "MSH-20D"**	**(Ⅱ-B) "MSH-30D"**
Cat. No.	230V	DH.WMH03020	DH.WMH03022
	120V	DH.WMH02020	DH.WMH02022
Price, Each. ₩			
Ⅲ. Digital Package-set		**(Ⅲ-A) "MSH-20D" Set**	**(Ⅲ-B) "MSH-30D" Set**
Cat. No.	230V	DH.WMH03021	DH.WMH03023
	120V	DH.WMH02021	DH.WMH02023
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

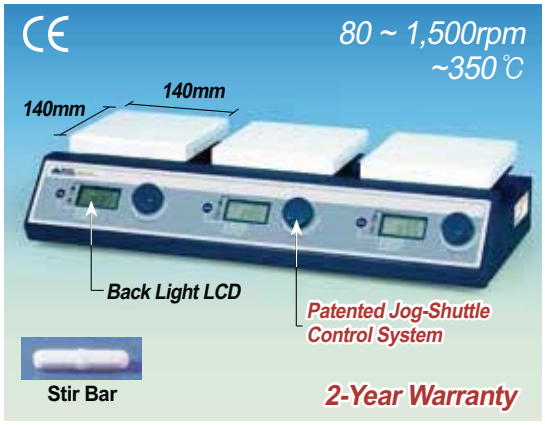
Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503060	(1) Temp. Probe, **"SS500", "PT100"**, Φ4×L250mm	
DH.WHP503061	(2) **Teflon Coated** Temp. Probe, **"SS510"**, Φ4×L250mm	
DH.WHP503011	Stand Rod, **"RD100"**, Φ12.7×L390 for **"MSH-30A / 30D"**	
DH.WHP503036	, **"RD200"**, Φ12×L450 for **"MSH-20A / 20D"**	
DH.WHP503012	Holder / Clamp / Clip, **"CL220"**, for Temp. Probe	

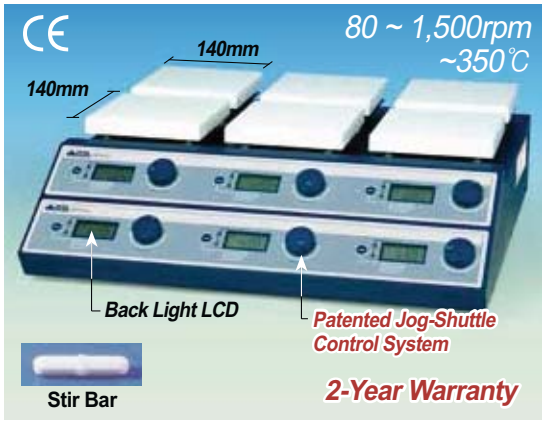
DAIHAN® 350℃ Systematic Multi-Hotplate Stirrer "SMHS", 3- or 6-Places, Ceramic-Coated Plate

With Digital Feedback Control, Independent Heating & Stirring Control, up to 350℃, 80~1,500 rpm

멀티 가열 자력 교반기, 우수한 온도균일성, 3- or 6- 구 개별 조절 가능



A. 3 Plate-type Multi-Hotplate Stirrer "SMHS-3"



B. 6(3×2) Plate-type Multi-Hotplate Stirrer "SMHS-6"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Excellent for Multi-use and wide range Sample Testing***
- ***Patented Jog-Shuttle Control System***

* Systemized 3- and 6-Hotplate Stirrer
* Independent Heating and Stirring Control
* Digital Feedback Control by High-Performance Microprocessor
* Ceramic Coated Plate-Chemical/Acid Resistance
* Maximum Temperature of 350℃ with ±0.3℃ Control Accuracy
* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
* Digital LCD with Back-Light Function
* Digital Timer Function Included : 99 hr 59 min
* Storage Function for the Set Values : Temperature, RPM and Timer
* Locking Mode for Experimental Safety Supported

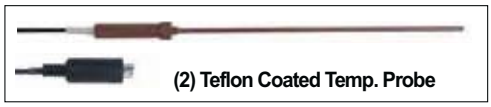
Specifications & Ordering information

Spec. \ Model		A. "SMHS-3" 3 Plates	B. "SMHS-6" 6 Plates
Plate-type		3 Plate-type	6(3×2) Plate-type
Plate Size		140×140mm	
Stirring Capa. & Motor Rating		Max. 20 Lit(H_2O), 9/4W×3	Max. 20 Lit(H_2O), 9/4W×6
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Temp. Range & Accuracy		Max. 350 ℃, ±0.3℃ at Set Temp.	
Temp. Resolution		0.1 ℃-Display, 0.5 ℃-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		400 W ×3 Plates	400 W ×6 Plates
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Ports for Stand Rod		2ea	4ea
Permissible Temp. & RH %		Room Temp. +5 ~ 50℃, 85% RH	
Material	Body	Powder Coated steel	
	Plate	Ceramic Coated Aluminum	
Dimension & Weight		510×240×h100mm, 10kg	510×410×h180mm, 18kg
Packing Size & Gross Weight		540×330×h170mm, 10kg	570×540×h230mm, 18kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WMH03503	DH.WMH03506
	120V	DH.WMH02503	DH.WMH02506
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

(1) Stainless-steel Temp. Probe


(2) Teflon Coated Temp. Probe

(3) Stand Rod "RD200", Stainless-steel

(4) Holder / Clamp / Clip for Temp. Probe

Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503060	(1) External / Direct Contact Temp. Probe, **"SS500"**, Stainless-steel, Φ4×L250mm, Cable L190mm	
DH.WHP503061	(2) External / Direct Contact Temp. Probe, **"SS510"**, **Teflon Coated**, Φ4×L250mm, Cable L190mm,	
DH.WHP503036	(3) Stand Rod **"RD200"**, Stainless-steel, 1.5p screw, Φ12×L450mm, for **"SMHS"**	
DH.WHP503012	(4) Holder/Clamp/Clip, **"CL220"**, for Temp. Probe	

Ice Maker Snow-type "IMS"

Ice Maker Flake-type "IMF"

DAIHAN® 50 & 80kg Automatic Ice Maker, Snow-type "IMS" & Flake-type "IMF" NEW
With Fully Automatic System, Uniform Ice, Production & Storage, 아이스메이커

- ***Made in Korea***
- ***PL(Product Liability) Insurance***
- ***No Separate Storage Bin Required.***
- ***Full Automatic System : Continuous Ice Production***
- ***Snow Type : Soft Particles in the Form of Rolling Carve***
  Flake Type : A Uniform, Rigid Ice Particle in the Form of Screw Turbine

∗ Ice Production and Storage Function at the Same Time
∗ Useful in Medical Labs, Pharmaceutical Industry, Scientific Labs, Restaurants and Super markets in General.
∗ Creates Uniform Ice with Minimal Water.
∗ R404 Refrigerant and Ozone Friendly
∗ Safety Water Level Sensor & Ice Level Sensor
∗ Consists of Main Unit, Supply Hose, Drain Hose, Scoop, Power Cable, Operation Manual
∗ Optional Water Pump

Specifications & Ordering information

Spec. \ Model		"IMS50"	"IMF80"
Ice Type		Snow-type	Flake-type
Production / Day		50 kg	80 kg
Storage Capacity		25 Lit	58 Lit
Compressor		1 / 3HP, R404A	
Door		Front PC Door	
Safety Circuit		Power Circuit Breaker, Ice Level Sensor, Water Level Sensor	
Dimensions (w×d×h)		360×475×620 mm	600×560×740 mm
Weight		40 kg	61 kg
Power Consumption		650 W	800 W
Electric Reqts.		230 V, 50 or 60 Hz	
Cat. No.	60Hz	DH.Ims8050	DH.Imf8080
	50Hz	DH.Ims8055	DH.Imf8085
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

※ 운임 별도!

Optional Accessory

		Ea. Price, ₩
DH.ImPu1001	Water Pump for "IMS" & "IMF"	

Granular Ice Maker "F125C"

Icematic® 120kg Automatic Ice Maker, Granular Flake-type "F125C"
With Trouble Free Paddle System, Energy Saving and Maximum Cooling Capacity, 아이스메이커

- ***Made in Italy***
- ***CE, GS and DVE Certification***
- ***No Separate Storage Bin Required.***
- ***Granular Ice Flakes with High Water Content.***

∗ Useful in Medical Labs, Pharmaceutical Industry, Scientific Labs, Restaurants and Super markets in General.
∗ The Innovative, Trouble Free Icematic Paddle System ensures Perfect Ice Every Time.
∗ Flake Ice is Generated through a Vertical Cylinder.
∗ The System Creates Uniform Ice with Minimal Water.
∗ R134 Refrigerant and Ozone Friendly
∗ 5 LED Indicators – Power, Full Bin Situation, Low Temperature, Screw Operation, Shortage of Water.
∗ Consist of Main Unit, Water Filter & Housing Set, Ice Sampling Tool, Operation Manual.

Specifications & Ordering information

Spec. \ Model		"F125C"
Ice Type		Granular Iceflake
Storage Capacity		27 kg
Daily Ice Production		120 kg / 24 h
Water Inlet Connection		3/4" GAS (Water Supply / Drain Tube : ID Φ20 mm Flexible Hose)
Dimensions and Weight		w680×d510×h1000mm / 64 kg
Single Phase Input		230 V, 60 Hz or 230 V, 50 Hz
Absorbed Power		490 W
Cat. No.	60Hz	IM.F125C
	50Hz	IM.F126C
Price, Each. ₩		

※ 운임 별도!

DAIHAN Scientific

Incubator

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

CO_2 ***New*** ..... P. 110~111
General Low Temp-Mini ***New*** ..... P. 112
General Purpose, Forced-air ..... P. 113~117
, Gravity-air ..... P. 118~121
, Multi-room, Forced-air ..... P. 122
Heating Block/Dry Bath Incubator ..... P. 123~125
Humidity/Temp Test Chamber ..... P. 126~128
Low Temp(B.O.D) ..... P. 129~131
Plant Growth Chamber ..... P. 132~133
Shaking, Bench Top-type ..... P. 136
, Front Door-type ..... P. 137
, Mini, CO_2 & Low Temp ***New*** ..... P. 134~135
, Multi-stack Refrigerated ..... P. 139
, Top Door-type ..... P. 138

General Low Temp-Mini
"ThermoStable™ IC-20"

CO_2 Incubator
"ICA"

General Gravity-air
"ThermoStable™ SIG-105"

Multi-room Incubator
"WIM-4"

Low Temp(B.O.D) Incubator
"ThermoStable™ IR-250"

Shaking Incubator
"ThermoStable™ IS-30"

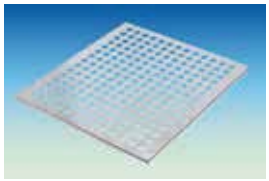
Controlled by Smart-Phone

Articles	Cat. No	Description

DAIHAN® Air-jacketed CO_2 Incubator "ICA", 101 · 150 Lit, 0~20% CO_2, Up to 60℃, ±0.1℃ NEW
With Precision CO_2 Sensor, UV Lamp 254nm, Microprocessor PID Control, Fan Forced-Convection, 2 Shelf Included, CO_2 인큐베이터

Air-jacketed CO_2 Incubator "ICA"

Tempered Safety Inner Glass Door & Enhanced Door Packing



(1) Perforated STS Shelf (Included)

(2) UV Lamp

(3) Regulator, Single-stage

- ***Made in Korea*** ■ ***2-Year Warranty***
- ***Precise CO_2 Sensor in Stable & Durable Housing, CO_2 Range 0~20%***
  - ***Dual Wavelength Detection, NDIR(Non Dispersive Infra-red) Sensor***
  - ***Automatic Temperature Compensation and Auto Zero Calibration.***

* Ideal for Medicine, Biochemistry and Agricultural Science Research, Industrial Production Departments of Biological Cells, Tissues, Bacterial Culture, etc.
* All Seamless Stainless-steel Interior for Corrosion Resistance and Decontamination
* Tempered Safety Inner Glass Door for easy Sample View without Door Opening
* Enhanced Door Packing to Keep Excellent Temp. & CO_2 Uniformity
* Air Filtration System(0.3㎛ HEPA Filter) Minimizes Contamination, Efficiency up to 99.97%.
* Microprocessor PID Control : Temp(~60°C), Timer, Alarm, Auto-tuning
* High-Quality LCD Display with Back-Light Function
* 10 Steps Programmable : Temperature Control and 999 Cycle 10 Steps.
* Detachable Shelf Frame : Adjustable Shelf
* Including Water Container, and 2 Stainless-steel Perforated Shelf

Specifications & Ordering information

Spec. \ Model		"ICA-100" Max. Capa. 101Lit	"ICA-150" Max. Capa. 150Lit
Capacity		101 Lit	150 Lit
Heating Mechanism		Air-jacket	
CO_2 Sensor		Digital Signal Processing NDIR Sensor	
Temp Range & Accuracy		Room Temp + 5℃ ~ 60℃, Accuracy ± 0.1℃ at 20 ~ 25℃	
CO_2 Range & Accuracy		0 ~ 20% CO_2 Concentration, Accuracy ± 0.1% at 5%	
Heat up Time (to 37℃)		30 min to 37℃	
CO_2 Concentration Time (to 37℃)		25 min to 5%	
Heating Power		300 W	570 W
CO_2 Outlet		1 kg/cm³	
UV Lamp		254 nm × 1ea	
Controller		Programmable Microprocessor Digital PID Controller with LCD Back Light	
Shelf (Included)		2 Stainless-steel Perforated Shelf	
Circulation		Circulation Fan with HEPA Filter(0.3㎛)	
Safety		Temp & CO_2 Alarm, Over Temp Protector, Sensor Error Display, Leakage Breaker	
Material		Interior : Stainless-steel Polished, Exterior : Stainless-steel Hair Lined	
Door		Interior : Tempered Safety Glass Door, Exterior : Magnetic Packing Door	
Dimension (w×d×h) & Weight	**Interior**	450×450×h500 mm	495×515×h600 mm
	Exterior	600×600×h600 mm, 65 kg	660×645×h1010 mm, 77 kg
	Packing	760×800×h1120 mm, 80 kg	730×810×h1130 mm, 92 kg
Power Consumption		340 W	610 W
Electric Reqts.		110V, 60Hz or 220V, 50/60Hz, 1 Phase	
Cat. No.	**220V**	**DH.Inc8001**	**DH.Inc8002**
	110V	**DH.Inc8011**	**DH.Inc8012**
Price, Each. ₩			

* **Other Specifications are available upon Customer's Request.** ※ **운임 별도!**

Spare Accessory

		Ea. Price, ₩
DH.IncA1001	(1) Perforated Shelf, STS, for **"ICA-100"**, w440×d400 mm	
DH.IncA1002	, for **"ICA-150"**, w485×d445 mm	
DH.IncA1005	(2) UV Lamp 254 nm, Φ30×205 mm, for **"ICA"**	

Optional Accessory

		Ea. Price, ₩
H11.801.10M	(3) Regulator, Single-stage, 150psi, Air, CO_2, Argon, Nitrogen, Helium	

Air-jacketed CO_2 Incubator with Validation (IQ, OQ) Service

		Set. Price, ₩
DH.IncA5001	Validation Service(IQ, OQ), with **"ICA-100"**	
DH.IncA5002	, with **"ICA-150"**	

DAIHAN® 4~45℃ & 0~10% CO_2 20Lit Mini CO_2 Incubator & CO_2 Shaking Incubator, "ThermoStable™ IC-20 & ICS-20"

Programmable PID Controlled 0.1℃ & 0.1%, Compact Design for Saving Space/Money, Ideal for Cell/Tissue Culture NEW

With Cooling/Heating system of Peltier Element/Auto-Tuning/Safety Device, 저온 미니 CO_2 배양기 & CO_2 진탕 배양기

A. 20Lit Mini CO_2 Incubator "ThermoStable™ IC-20" Including CO_2 Gas Cylinder & Regulator

Figure; Assembly CO_2 Shaking Incubator
You can easily connect the Incubator & Shaker

B. "ICS-20" CO_2 Shaking Incubator Set

C. "SHO-1DI" Separable Orbital Shaker
; It can be Used Individually and Be Accepted

A. Standard CO_2 Incubator "ThermoStable™ IC-20"
Including CO_2 Regulator & CO_2 Aluminum Cylinder

B. Assembly CO_2 Shaking Incubator Package Set "ThermoStable™ ICS-20"
= Standard CO_2 Incubator "IC-20" + Orbital Shaker "SHO-1DI"

C. Multiuse Digital Orbital Motion Shaker "SHO-1DI" : Can Be Used Individually.
"SHO-1DI" is same with existing Orbital Shaker "SHO-1D" except Platform, and can be Accepted Optional Various Platforms ; See the Shaker Section

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance*** ■ ***2-Year Warranty***
- ***Applications : Cell/Tissue Culture & Transfer, Embryo/Microorganism Culture***
- ***NDIR CO_2 Sensor : Dual Wavelength Type***
  Rapid Initial Response Time, not Affected by User Environment
- ***ABS-Resin Chamber & Housing : Light-weight/Compact Design***
  Good for Money & Space Saving and Personal Use.
- ***Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-Information, and Traceable Data Base System.***

∗ Cooling/Heating System of PELTIER ELEMENT :
- Cooling and Heating by using Thermoelectric Semiconductor Element
- Minimizes Noise(<20dB) and Power Consumption

∗ Auto-Tuning : Rapid Response and High Stability According to the Thermal Properties and the Rate of Thermal Response of the Object

∗ Safety Device : Over Temperature & Over Current Protection, Sensor Error Detection

∗ 4-Connection Device to Join a Shaker "SHO-1DI" in the Bottom outside of the CO_2 Incubator "IC-20"

Specifications & Ordering Information

Spec. \ Model		A. CO_2 Standard Incubator "ThermoStable™ IC-20"	B. CO_2 Shaking Incubator Set "ThermoStable™ ICS-20"
Capacity (Lit)		20Lit Working Chamber	
Temp. Range Accuracy Uniformity		4 ~ 45℃, 0.1℃; Digital PID Control ±0.2℃(No Load) ±0.2℃(at 37℃)	
CO_2 Range & Control		0 ~ 10%, 0.1% ; NDIR CO_2 Sensor	
Cooling/Heating		Peltier Element Module	
Air Flow-type		Gravity Flow Circulation	
1 Shelf and 3 Location Brackets		1 Perforated ABS Shelf(w210×d230×Thick 8mm) included Adjustable Shelf Location Height of 3-Stage	
Condensate Drain		Natural Evaporation	
Incubator Material		"ABS-Resin" Chamber & Housing, Except Shaking Base	
Incubator Dimension	Interior	w213×d265×h360mm Chamber Only	
	Exterior	w280×d330×h510mm	w280×d330×h670mm; Including Shaking Base
C. SHAKING-Base; Connecting the Multiuse Shaking "SHO-1DI"			
- Motor & Speed - Controller & Display - Timer & Alarm - Motor & Max-Load - Safety Circuit - Material - Size & Weight		-	- Orbital, 10 ~ 300rpm, 8mm Stroke - Programmable Digital Feedback, LCD - 99hr 59min with ∞ Run, Error Status & Time End - Brushless DC Motor, Max-Load 10kg - Overload Protector of Motor - Powder Coated Steel Body - w260×d330×h140mm, 14kg
Net Weight (kg)		10kg	10kg+14kg Shaking Base ("SHO-1DI") = 24kg
Power Consumption		56W	56W+40W (Shaking)
Electric Reqts.		Free Voltage; 1Phase, AC90-240V, 50/60Hz	
Cat. No.	230V	DH.IncC020	DH.IncCS020
	120V	DH.IncC020.1	DH.IncCS020.1
Price, Set. ₩			

C. SHAKING-Base; Orbital Shaker

		Ea. Price, ₩
DH.SHO01DI	Shaker "SHO-1DI", 230V	
DH.SHO01DI.1	, 120V	

※*Note! Details of Optional Various Platforms : See The "Shaker" Section*

DAIHAN® 4~45℃ 20 Lit Mini-Low Temperature Incubator & Shaking Incubator, "ThermoStable™ IR-20 & IRS-20" NEW

2-Step Programmable PID Controlled 0.1℃, Compact Design for Saving Space/Money, Ideal for Culture & Storage of Microorganism/Clone
With Cooling/Heating system of Peltier Element/Auto-Tuning/Safety Device, 저온 미니-배양기&진탕 배양기, 20Lit, 4~45℃/0.1℃

A. 20Lit Mini-Low Temp Incubator "ThermoStable™ IR-20"

Figure; Assembly Shaking Incubator
You can easily connect the Incubator & Shaker

B. "IRS-20" Low Temp. Shaking Incubator Set

C. "SHO-1DI" Separable Orbital Shaker

; It can be Used Individually and Be Accepted

A. Standard Incubator "ThermoStable™ IR-20"

B. Assembly Shaking Incubator Package Set
"ThermoStable™ IRS-20" = "IR-20" Incubator + Orbital Shaker "SHO-1DI"

C. Multiuse Digital Orbital Motion Shaker "SHO-1DI" : Can be Used Individually.

It is same with existing Orbital Shaker "SHO-1D" except Platform and The Shaker "SHO-1DI" can be Accepted Optional Various Platforms; See "Shakers" Section

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance*** ■ ***2-Year Warranty***
- ***Applications Microorganism / Clone Culture & Storage, Reaction Experiment of Enzyme Immunity & Bacteriophage in Vitro Packaging, DNA Ligation, etc.***
- ***2-Step Temperature Control(PID Micro Processor) ; With 2-Step Setting Temp. Microorganism is Cultivated and Preserved by One Time(Setting time 99 hours)***
- ***ABS-Resin Chamber & Housing; Light-weight / Compact Design Good for Money & Space Saving and Personal Use.***
- ***Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-Information, and Traceable Data Base System.***

∗ Cooling / Heating System of PELTIER ELEMENT ;
- Cooling and Heating by using Thermoelectric Semiconductor Element
- Minimizes Noise (<20dB) and Power Consumption

∗ Auto Tuning : Rapid Response and High Stability According to the Thermal Properties and the Rate of Thermal Response of the Object

∗ Safety Device : Over Temperature & Over Current Protection, Sensor Error Detection

∗ There are 4-Connection Device to Join a Shaker "SHO-1DI" in the Bottom outside of the Incubator "IR-20"

Specifications & Ordering Information

Spec. \ Model		A. Standard Incubator "ThermoStable™ IR-20"	B. Shaking Incubator Set "ThermoStable™ IRS-20"
Capacity (Lit)		20Lit Working Chamber	
Temp. Range Accuracy Uniformity		4℃ ~ 45℃, 0.1℃; Digital PID Control ±0.2℃(No Load) ±0.2℃(at 37℃)	
Cooling / Heating		Peltier Element Module	
2-Step Operation		Ideal for Cultivation and Preservation	
Air Flow-type		Gravity Flow Circulation	
1 Shelf and 3 Location Brackets		1 Perforated ABS Shelf(w210×d230×Thick 8mm) included Adjustable Shelf Location Height of 3-Stage	
Condensate Drain		Natural Evaporation	
Incubator Material		"ABS-Resin" Chamber & Housing, Except Shaking Base	
Incubator Dimension	Interior	w213×d265×h360mm Chamber Only	
	Exterior	w280×d330×h510mm	w280×d330×h670mm; Including Shaking Base
C. SHAKING-Base; Connecting the Multiuse Shaking "SHO-1DI"			
- Motion&Speed - Controller&Display - Timer&Alarm - Motor&Max-Load - Safety Circuit - Material - Size&Weight		-	- Orbital, 10 ~ 300rpm, 15mm Stroke - Programmable Digital Feedback, LCD - 99hr 59min with ∞ Run, Error Status & Time End - Brushless DC Motor, Max-Load 10kg - Overload Protector of Motor - Powder Coated Steel Body - w260×d330×h140mm, 14kg
Net Weight (kg)		7kg	7kg+14kg Shaking Base ("SSO-1DI") = 21kg
Packing Size & Weight		9kg	25kg
Power Consumption		56W	56W+40W (Shaking)
Electric Reqts.		Free Voltage; 1Phase, AC90-240V, 50 / 60Hz	
Cat. No.	230V	DH.IncR020	DH.IncRS020
	120V	DH.IncR020.1	DH.IncRS020.1
Price, Set. ₩			

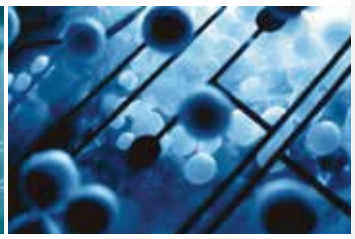
C. SHAKING-Base; Orbital Shaker

		Ea. Price, ₩
DH.SHO01DI	Shaker **"SHO-1DI"**, 230V	
DH.SHO01DI.1	, 120V	

※*Note! Details of Optional Various Platforms : See The "Shaker" Section*

Maximum Convenience by Advanced Digital Technology

Features of DAIHAN Incubator



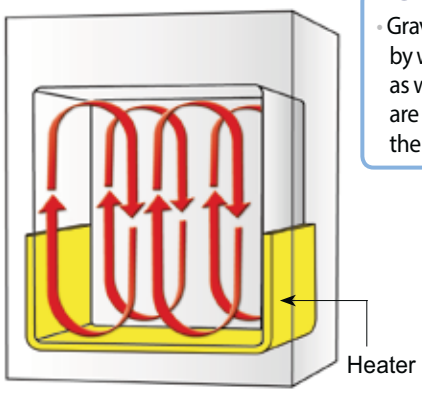
High Performance Heating Mechanism of DAIHAN accomplishing world's best temperature accuracy and uniformity

The new types of Incubator of DAIHAN are outfitted with high performance heating mechanism that is optimized respectively for capacity of chamber, power of heating element and air circulation type (Gravity Convection or Forced Convection).

The temperature displayed on the controller is accurately consistent with the actual temperature in the very center of the chamber or the average temperature in the entire area of the chamber, which maintains precisely within fluctuation specification. In addition, the temperature in the entire area of the chamber shows a very high stability keeping within a very slight variation specification in terms of temperature uniformity. Simultaneously, through the optimization of Fuzzy-PID controller, the 'heat-up time' to reach the Set Temperature after operating and the 'recovery time' to get back to the set temperature after opening and closing of the door are very short.

The newly developed high performance heating mechanism has achieved high degree of temperature accuracy and uniformity in the chamber. This is achieved by the heating elements installed on three sides - that is, the left, right and bottom parts of a chamber - which directly heat the stainless-steel chamber. This either enhances its material thermal conductivity to maximum (in case of the Incubator) or the heated air from the pre-heating zone in air-jacket type that is built in the three sides outside a chamber circulates first (in case of the Oven).

» Incubator

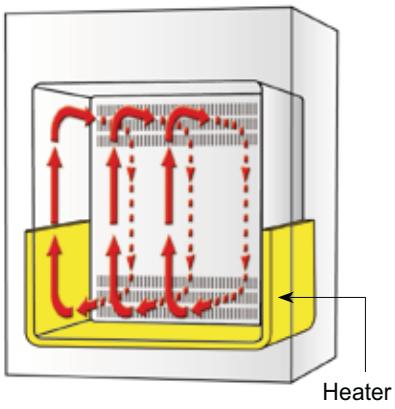


Gravity-air

- Gravity convection is to be supplemented and maximized by way of forming radiant and conductive heat on the bottom as well as both sides of the chamber, while heating elements are fitted closely to the three sides outside the chamber by the steel structure of 1.5mm in thickness.

Forced-air

- The same heating structure as Gravity Air-Flow model.
- Installs an air-flow room with a fan built in the back side of the chamber to achieve effective forced convection.
- Achieves high temperature uniformity and minimizes mutual contamination between samples by maintaining air flow in forced convection to top.



■ High Performance Heating Mechanism

The world's best performance and quality coming true via innovative heating mechanism !!

» Minimum

Fluctuation !
Minimization of Fluctuation in Temperature

Variation !
Minimization of spatial variation in temperature inside the chamber

Heat-up Time !
Minimization of reaching the set temperature

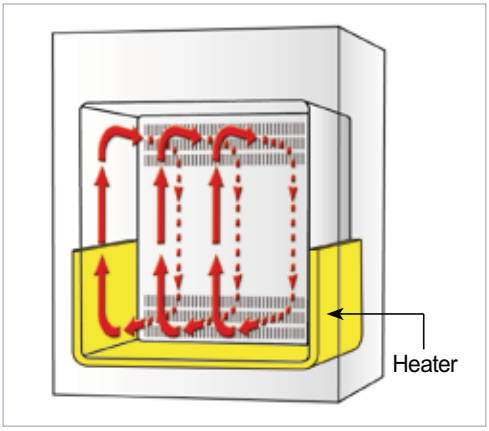
Overshoot !
Minimization of overshooting at the time of reaching the set temperature

DAIHAN® Forced-air Incubator "ThermoStable™ IF", Class-I Medical Device(NIDS), 50 · 105 · 155 Lit

With 2 Wire Shelf/Digital PID Control/Jog-Dial & Push Button/Digital LCD/Backlight/Certi. & Traceability, up to 70℃, ±0.2℃

강제 순환식 배양기/인큐베이터, 디지털 퍼지 컨트롤, 우수한 온도균일성

"ThermoStable™ IF-105", Forced-air Incubator



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.

- ***Made in Korea*** ■ ***UL / CUL Certified*** ■ ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Optimized Air Flow by Forced-air Mechanism***
- ***3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism***
- ***Patented Jog-Dial Control System***
- ***GD(Good Design)-mark*** ■ ***PL(Product Liability) Insurance***

* Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on
* Optimized Air Flow by Forced-air Mechanism
* Digital PID Control System Implementing Superior Temperature Accuracy
* Alarm Function : Error status and Timer-end
* RS232C Interface for Monitoring and Controlling with PC
* Ambient to 70℃ of Temp. Range, Fluctuation of ±0.2℃ at 37℃, ±0.3℃ at 50℃
* Storage Function of Temperature and Timer setting values
* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)
* Corrosion Resistant 304 Stainless-steel Chamber
* Incubator Temperature & Incubator Current Protection, Sensor Error Detection

Specification

Spec. \ Model		ThermoStable™ IF-50 Max. Capa. 50Lit	ThermoStable™ IF-105 Max. Capa. 105Lit	ThermoStable™ IF-155 Max. Capa. 155Lit
Capacity		**50 Lit**	**105 Lit**	**155 Lit**
Dimension (w×d×h)	**Interior (mm)**	370×350×419	485×410×533	550×475×600
	Exterior (mm)	518×637×700	635×695×841	700×760×906
Heater Power		200W	300W	400W
Temp.	**Range**	Room Temp. +5℃ to 70℃		
	Fluctuation	± 0.2℃ at 37℃, ± 0.3℃ at 50℃		
	Variation	± 0.5℃ at 37℃, ± 0.9℃ at 50℃	± 0.4℃ at 37℃, ± 0.7℃ at 50℃	
	Sensor	PT 100		
Control Resolution		±0.1℃		
Heat-up Time		17 min. to 37℃, 28 min. to 50℃	17 min. to 37℃, 30 min. to 50℃	
Recovery Time (Door open 30sec)		3 min. to 37℃, 4 min. to 50℃		
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button		
RS232 Port		Available to connect with PC		
Display		Digital LCD with Back Light		
Timer		99hr 59 min (delay/continuous function)		
Material	**Internal**	Stainless-steel (#304)		
	External	Powder Coated steel		
	Inner Door	Inner Tempered Glass Door		
Shelf		2ea of PE-coated steel Wire Shelf included, Load per Shelf : 16 kg		
Ventilation		1ea of Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm		
Circulation		Forced-air Type		
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector		
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function(Temp. and Time) Locking Mode(Jog-Dial Input Disabled) Alarm (Error Status and Timer-end)		
Net Weight (kg)		46	66	81
Packing Size (w×d×h) (mm)		628×752×775	710×731×1,018	731×810×1,018
Shipping Weight (kg)		58	74	92
Power Consumption		216.3 W	302.9 W	438.1 W
Energy Consumption, at 37℃		28 Wh	43 Wh	58 Wh
, at 50℃		84 Wh	129 Wh	145 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz		

*** Other Specifications are available upon Customer's Request.**

<Continued On Next Page>

<*Continued From...*DAIHAN® Forced-air Incubator "ThermoStable™ IF">

※ 운임 약 ₩ 25,000 별도!

Ordering Information

		Ea. Price, ₩
DH.WIF03050	Incubator, Forced, **230V, 50 Lit, "ThermoStable IF-50"**	
DH.WIF03105	**, 105 Lit, "ThermoStable IF-105"**	
DH.WIF03155	**, 155 Lit, "ThermoStable IF-155"**	
DH.WIF04050	Incubator, Forced, **120V, 50 Lit, "ThermoStable IF-50"**	
DH.WIF04105	**, 105 Lit, "ThermoStable IF-105"**	
DH.WIF04155	**, 155 Lit, "ThermoStable IF-155"**	

Spare PE-coated Steel Wire Shelf

		Ea. Price, ₩
DH.WIG11050	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 50 Lit, "IGS050"**, w340×d310mm	
DH.WIG11105	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 105 Lit, "IGS105"**, w455×d375mm	
DH.WIG11155	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 155 Lit, "IGS155"**, w520×d440mm	

Optional Stainless-steel Wire Shelf

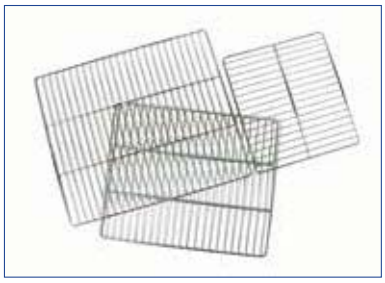
		Ea. Price, ₩
DH.WON11050	Wire Shelf, Stainless-steel, with 2 Brackets, **for 50 Lit, "ONS050"**, w340×d310mm	
DH.WON11105	Wire Shelf, Stainless-steel, with 2 Brackets, **for 105 Lit, "ONS105"**, w455×d375mm	
DH.WON11155	Wire Shelf, Stainless-steel, with 2 Brackets, **for 155 Lit / 305Lit, "ONS155"**, w520×d440mm	

Forced Convection Incubator with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WIF31050	Validation Service(IQ, OQ), with "ThermoStable IF-50", **"IFV050"**	
DH.WIF31105	, with "ThermoStable IF-105", **"IFV105"**	
DH.WIF31155	, with "ThermoStable IF-155", **"IFV155"**	

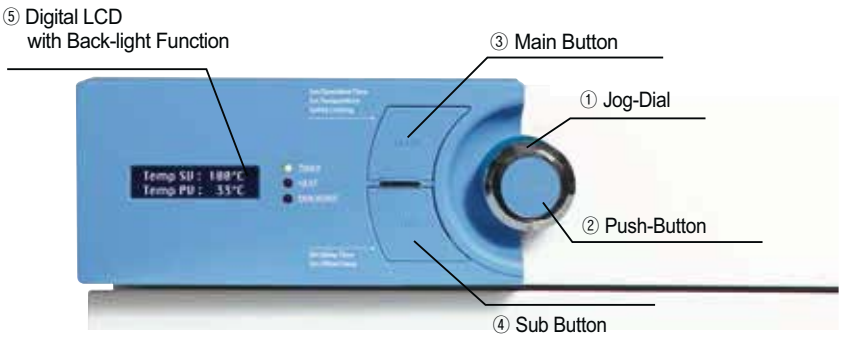
"ThermoStable IF-105", Forced-air Incubator

Wire Shelf, PE-coated Steel (Included)

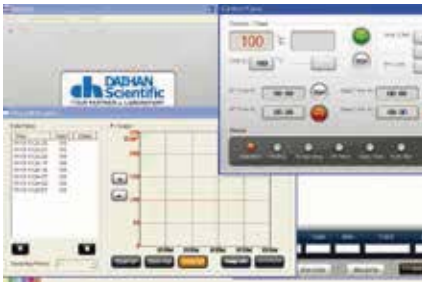


Wire Shelf, Stainless-steel (Optional)

New Jog-Dial Controller



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.



WiseRemote Control Software :

Connection of Temperature Devices with Interface RS232C to a PC
Export Recorded Data(Excel Spreadsheet)

∗ You can Download this Software from DAIHAN-Sci.com Shopping-mall

DAIHAN® SMART Forced-air Incubator "ThermoStable™ SIF", 50 · 105 · 155 Lit, 3-Side Heating Zone

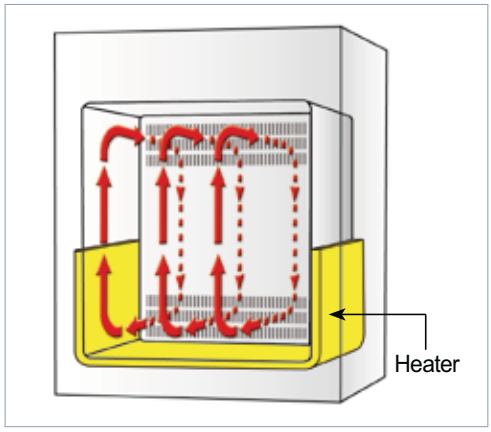
With Smart-Lab™ Controller/4″ Full Touch Screen/Fuzzy-PID Control/2 Wire Shelf/Certi. & Traceability, up to 70℃, ±0.2℃

스마트 강제 순환식 배양기/인큐베이터, 우수한 온도균일성, WiRe™서비스, 4인치 풀터치스크린 조절기

"ThermoStable™ SIF-105", SMART Forced-air Incubator

- ■ ***Made in Korea*** ■ ***UL / CUL Certified*** ■ ***CE Certified***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Optimized Air Flow by Forced-air Mechanism***
- ■ ***3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism***
- ■ ***Smart-Lab™ Controller***
- ■ ***GD(Good Design)-mark*** ■ ***PL (Product Liability) Insurance***

∗ Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp, Germination, and so on
∗ Optimized Air Flow by Forced-air Mechanism
∗ Ergonomic Design 4″ Full Touch Screen TFT LCD(Smart-Lab™ Controller)
∗ WiRe™ App Service. ∗ Automatic Data Recording
∗ Self-Diagnostic Function ∗ Internet Connectivity with WiFi
∗ Variable Program Setting for Multiple Patterns with Multiple Segments
∗ The Recorded Data Could be transferred to PC by USB memory
∗ Compact New Body Design ∗ Controller SW can be upgraded through USB port.
∗ 2ea of PE-coated steel Wire Shelves Included
∗ RS232C Interface for Monitoring and Controlling with PC
∗ Ambient to 70℃ of Temp. Range, Fluctuation of ±0.2℃ at 37℃, ±0.3℃ at 50℃
∗ Corrosion Resistant 304 Stainless-steel Chamber
∗ Incubator Temperature & Incubator Current Protection, Sensor Error Detection



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.

Display of Smart-Lab™ Controller

Specification

Spec. \ Model		ThermoStable™ SIF-50 Max. Capa. 50Lit	ThermoStable™ SIF-105 Max. Capa. 105Lit	ThermoStable™ SIF-155 Max. Capa. 155Lit
Capacity		**50 Lit**	**105 Lit**	**155 Lit**
Dimension (w×d×h)	**Interior (mm)**	370×350×419	485×410×533	550×475×600
	Exterior (mm)	518×637×700	635×695×841	700×760×906
Heater Power		200W	300W	400W
Temp.	**Range**	Room Temp. +5℃ to 70℃		
	Fluctuation	± 0.2℃ at 37℃, ± 0.3℃ at 50℃		
	Variation	± 0.5℃ at 37℃, ± 0.9℃ at 50℃	± 0.4℃ at 37℃, ± 0.7℃ at 50℃	
	Sensor	PT 100		
Control Resolution		±0.1℃		
Heat-up Time		17 min. to 37℃, 28 min. to 50℃	17 min. to 37℃, 30 min. to 50℃	
Recovery Time (Door open 30sec)		3 min. to 37℃, 4 min. to 50℃		
Controller		Smart-Lab™ Controller		
RS232		Port Available to connect with PC		
Display		4″ Full Touch Screen TFT LCD		
Timer		99hr 59 min (delay/continuous function)		
Material	**Internal**	Stainless-steel (#304)		
	External	Powder Coated steel		
	Inner Door	Inner Tempered Glass Door		
Shelf		2ea of PE-coated steel Wire Shelf included, Load per Shelf : 16 kg		
Ventilation		1ea of Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm		
Circulation		Forced-air Type		
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector		
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function (Temp. and Time) Alarm (Error Status and Timer-end)		
Net Weight (kg)		46	66	81
Packing Size (w×d×h) (mm)		628×752×775	710×731×1,018	731×810×1,018
Shipping Weight (kg)		58	74	92
Power Consumption		216.3 W	302.9 W	438.1 W
Energy Consumption, at 37℃		28 Wh	43 Wh	58 Wh
, at 50℃		84 Wh	129 Wh	145 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz		

∗ **Other Specifications are available upon Customer's Request.**

<Continued On Next Page>

<*Continued From...* DAIHAN® SMART Forced-air Incubator "ThermoStable™ SIF" >

※ 운임 약 ₩ 25,000 별도!

Ordering Information

		Ea. Price, ₩
DH.SWIF03050	Incubator, Forced, **230V, 50 Lit, "ThermoStable SIF-50"**	
DH.SWIF03105	**, 105 Lit, "ThermoStable SIF-105"**	
DH.SWIF03155	**, 155 Lit, "ThermoStable SIF-155"**	
DH.SWIF04050	Incubator, Forced, **120V, 50 Lit, "ThermoStable SIF-50"**	
DH.SWIF04105	**, 105 Lit, "ThermoStable SIF-105"**	
DH.SWIF04155	**, 155 Lit, "ThermoStable SIF-155"**	

Spare PE-coated Steel Wire Shelf

		Ea. Price, ₩
DH.WIG11050	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 50 Lit, "IGS050"**, w340×d310mm	
DH.WIG11105	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 105 Lit, "IGS105"**, w455×d375mm	
DH.WIG11155	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 155 Lit, "IGS155"**, w520×d440mm	

Optional Stainless-steel Wire Shelf

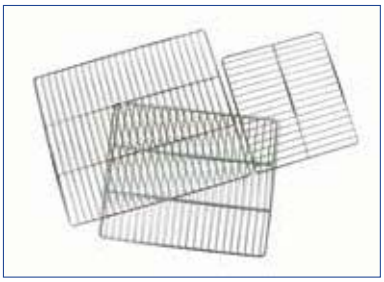
		Ea. Price, ₩
DH.WON11050	Wire Shelf, Stainless-steel, with 2 Brackets, **for 50 Lit, "ONS050"**, w340×d310mm	
DH.WON11105	Wire Shelf, Stainless-steel, with 2 Brackets, **for 105 Lit, "ONS105"**, w455×d375mm	
DH.WON11155	Wire Shelf, Stainless-steel, with 2 Brackets, **for 155 Lit, "ONS155"**, w520×d440mm	

SMART Incubator with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.SWIF31050	Validation Service(IQ, OQ), with "SIF-50", **"SIFV050"**	
DH.SWIF31105	, with "SIF-105", **"SIFV105"**	
DH.SWIF31155	, with "SIF-155", **"SIFV155"**	

"ThermoStable SIF-105", SMART Forced-air Incubator

Wire Shelf, PE-coated Steel (Included)



Wire Shelf, Stainless-steel (Optional)

DAIHAN WiRe™ App Service

4″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

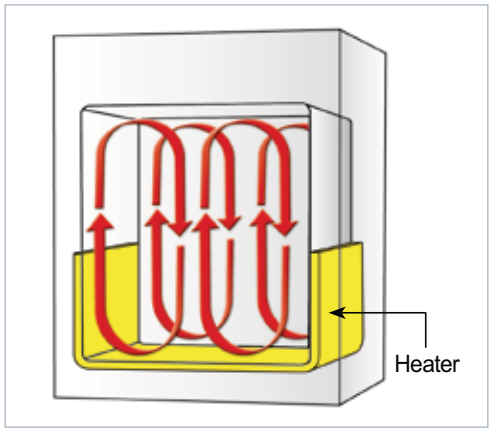
Controlled by Smart-Phone

DAIHAN® Gravity-air Incubator "ThermoStable™ IG", Class I Medical Device(NIDS), 32 · 50 · 105 · 155 Lit

With 2 Wire Shelf/Digital PID Control/Jog-Dial & Push Button/Digital LCD & Backligh, Certi. & Traceability, up to 70℃, ±0.2℃

자연 대류식 배양기/인큐베이터, 디지털 퍼지 컨트롤, 우수한 온도 균일도와 정확도

"ThermoStable™ IG-105", Gravity-air Incubator



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.

- ***Made in Korea*** ***UL / CUL Certified*** ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Optimized Air Circulation by Gravity-air preventing Cross Contamination of Samples***
- ***3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism*** ***Patented Jog-Dial Control System***
- ***GD(Good Design)-mark*** ***PL (Product Liability) Insurance***

∗ Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp Germination, and so on
∗ Optimized Air Circulation by Gravity-air preventing Cross Contamination of Samples
∗ Digital PID Control System Implementing Superior Temperature Accuracy
∗ RS232C Interface for Monitoring and Controlling with PC
∗ Ambient to 70℃ of Temp. Range, Fluctuation of ±0.2℃ at 37℃, ±0.3℃ at 50℃
∗ Alarm Function : Error status and Timer-end
∗ Storage Function of Temperature and Timer setting values
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)
∗ Corrosion Resistant 304 Stainless-steel Chamber
∗ Incubator Temperature & Incubator Current Protection, Sensor Error Detection

Specification

Spec. \ Model		ThermoStable™ IG-32 Max. Capa. 32L	ThermoStable™ IG-50 Max. Capa. 50L	ThermoStable™ IG-105 Max. Capa. 105L	ThermoStable™ IG-155 Max. Capa. 155L
Capacity		**32 Lit**	**50 Lit**	**105 Lit**	**155 Lit**
Dimension (w×d×h)	**Interior (mm)**	312×290×360	370×350×420	485×410×535	550×475×600
	Exterior (mm)	458×477×624	518×537×701	635×595×841	700×660×906
Heater Power		150W	200W	300W	400W
Temp.	**Range**	Range Room Temp. +5℃ to 70℃			
	Fluctuation	± 0.2℃ at 37℃, ± 0.3℃ at 50℃			
	Variation	± 0.6℃ at 37℃, ± 1.0℃ at 50℃			
	Sensor	PT 100			
Control Resolution		±0.1℃			
Heat-up Time		25 min. to 37℃, 40 min. to 50℃			30 min. to 37℃, 40 min. to 50℃
Recovery Time (Door open 30sec)		8 min. to 37℃ 12 min. to 50℃		10 min. to 37℃ 15 min. to 50℃	
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button			
RS232		Available to connect with PC			
Display		Digital LCD with Back Light			
Timer		99hr 59 min (delay/continuous function)			
Material	**Internal**	Stainless-steel (#304)			
	External	Powder Coated steel			
	Inner Door	Inner Tempered Glass Door			
Shelf		2ea of PE-coated Steel Wire Shelf included, Load per Shelf : 16 kg			
Ventilation		1ea of Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function (Temp. and Time) Locking Mode (Jog-Dial Input Disabled) Alarm (Error Status and Timer-end)			
Net Weight (kg)		32	40	59	71
Packing Size (w×d×h) (mm)		568×592×698	628×652×775	731×710×1,018	796×775×1,083
Shipping Weight (kg)		39	53	67	78
Power Consumption		159 W	169.9 W	292.9 W	420.5 W
Energy Consumption, at 37℃		34 Wh	41 Wh	63 Wh	99 Wh
, at 50℃		81 Wh	103 Wh	152 Wh	212 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz			

∗ **Other Specifications are available upon Customer's Request.**

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<*Continued From...*DAIHAN® Gravity-air Incubator "ThermoStable™ IG">

※ 운임 약 ₩ 25,000 별도!

Ordering Information

		Ea. Price, ₩
DH.WIG03032	Incubator, Gravity, **230V, 32 Lit, "ThermoSatble IG-32"**	
DH.WIG03050	**, 50 Lit, "ThermoSatble IG-50"**	
DH.WIG03105	**, 105 Lit, "ThermoSatble IG-105"**	
DH.WIG03155	**, 155 Lit, "ThermoSatble IG-155"**	
DH.WIG04032	Incubator, Gravity, **120V, 32 Lit, "ThermoSatble IG-32"**	
DH.WIG04050	**, 50 Lit, "ThermoSatble IG-50"**	
DH.WIG04105	**, 105 Lit, "ThermoSatble IG-105"**	
DH.WIG04155	**, 155 Lit, "ThermoSatble IG-155"**	

Spare PE-coated Steel Wire Shelf

		Ea. Price, ₩
DH.WIG11032	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 32 Lit, "IGS032"**, w280×d260mm	
DH.WIG11050	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 50 Lit, "IGS050"**, w340×d310mm	
DH.WIG11105	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 105 Lit, "IGS105"**, w455×d375mm	
DH.WIG11155	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 155 Lit, "IGS155"**, w520×d440mm	

Optional Stainless-steel Wire Shelf

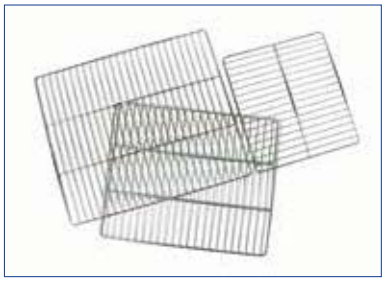
		Ea. Price, ₩
DH.WIG12032	Wire Shelf, Stainless-steel, with 2 Brackets, **for 32 Lit, "IGSN032"**, w280×d260mm	
DH.WON11050	Wire Shelf, Stainless-steel, with 2 Brackets, **for 50 Lit, "ONS050"**, w340×d310mm	
DH.WON11105	Wire Shelf, Stainless-steel, with 2 Brackets, **for 105 Lit, "ONS105"**, w455×d375mm	
DH.WON11155	Wire Shelf, Stainless-steel, with 2 Brackets, **for 155 Lit / 305Lit, "ONS155"**, w520×d440mm	

Gravity Convection Incubator with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WIG31032	Validation Service(IQ, OQ), with "ThermoSatble IG-32", **"IGV032"**	
DH.WIG31050	, with "ThermoSatble IG-50", **"IGV050"**	
DH.WIG31105	, with "ThermoSatble IG-105", **"IGV105"**	
DH.WIG31155	, with "ThermoSatble IG-155", **"IGV155"**	

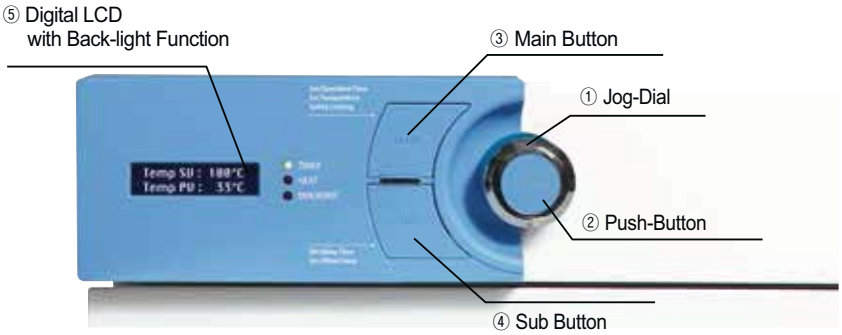
"ThermoStable IG-105", Gravity-air Incubator

Wire Shelf, PE-coated Steel (Included)



Wire Shelf, Stainless-steel (Optional)

New Jog-Dial Controller



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

WiseRemote Control Software :

Connection of Temperature Devices with Interface RS232C to a PC
Export Recorded Data(Excel Spreadsheet)

* You can Download this Software from DAIHAN-Sci.com Shopping-mall

DAIHAN® SMART Gravity-air Incubator "ThermoStable™ SIG", Class I Medical Device(NIDS), 32 · 50 · 105 · 155 Lit

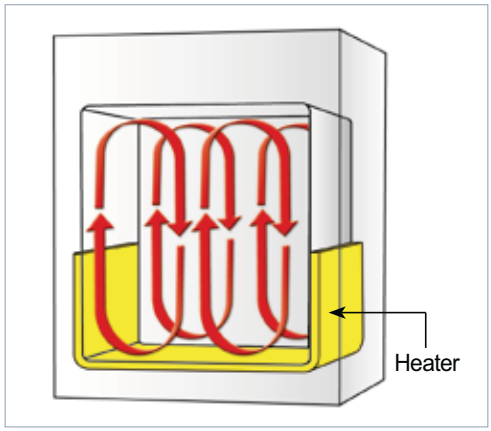
With Smart-Lab™ Controller/4″ Full Touch Screen/Fuzzy-PID Control/2 Wire Shelf/Certi. & Traceability, up to 70℃, ±0.2℃

스마트 자연 대류식 배양기/인큐베이터, 우수한 온도 균일도와 정확도, WiRe™서비스, 4인치 풀터치스크린 조절기

"ThermoStable™ SIG-105", SMART Gravity-air Incubator

- ***Made in Korea*** ■ ***UL / CUL Certified*** ■ ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Optimized Air Circulation by Natural Flow preventing Cross Contamination of Samples***
- ***3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism***
- ***Smart-Lab™ Controller***
- ***GD(Good Design)-mark*** ■ ***PL (Product Liability) Insurance***

* Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on
* Corrosion Resistant 304 Stainless-steel Chamber
* Optimized Air Circulation by Natural Flow preventing Cross Contamination of Samples
* Ergonomic Design 4″ Full Touch Screen TFT LCD(Smart-Lab™ Controller)
* WiRe™ App Service.
* Automatic Data Recording
* Self-Diagnostic Function
* 2ea of PE-coated steel Wire Shelves Included
* Variable Program Setting for Multiple Patterns with Multiple Segments
* The Recorded Data could be transferred to PC by USB memory
* Controller SW can be upgraded through USB port.
* Internet Connectivity with WiFi
* Compact New Body Design
* RS232C Interface for Monitoring and Controlling with PC
* Ambient to 70℃ of Temp. Range, Fluctuation of ±0.2℃ at 37℃, ±0.3℃ at 50℃
* Over Temperature & Over Current Protection, Sensor Error Detection



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.

Display of Smart-Lab™ Controller

Specification

Spec. \ Model		ThermoStable™ SIG-32 Max. Capa. 32L	ThermoStable™ SIG-50 Max. Capa. 50L	ThermoStable™ SIG-105 Max. Capa. 105L	ThermoStable™ SIG-155 Max. Capa. 155L
Capacity		**32 Lit**	**50 Lit**	**105 Lit**	**155 Lit**
Dimension (w×d×h)	**Interior (mm)**	312×290×360	370×350×420	485×410×535	550×475×600
	Exterior (mm)	458×477×624	518×537×701	635×595×841	700×660×906
Heater Power		150W	200W	300W	400W
Temp.	**Range**	Room Temp. +5℃ to 70℃			
	Fluctuation	± 0.2℃ at 37℃, ± 0.3℃ at 50℃			
	Variation	± 0.6℃ at 37℃, ± 1.0℃ at 50℃			
	Sensor	PT 100			
Control Resolution		±0.1℃			
Heat-up Time		25 min. to 37℃, 40 min. to 50℃			30 min. to 37℃, 40 min. to 50℃
Recovery Time (Door open 30sec)		8 min. to 37℃ 12 min. to 50℃		10 min. to 37℃ 15 min. to 50℃	
Controller		Smart-Lab™ Controller			
RS232		Available to connect with PC			
Display		4″ Full Touch Screen TFT LCD			
Timer		99hr 59 min (delay/continuous function)			
Material	**Internal**	Stainless-steel (#304)			
	External	Powder Coated steel			
	Inner Door	Inner Tempered Glass Door			
Shelf		2ea of PE-coated steel Wire Shelf included, Load per Shelf : 16 kg			
Ventilation		1ea of Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function (Temp. and Time) Alarm (Error Status and Timer-end)			
Net Weight (kg)		32	40	59	71
Packing Size (w×d×h) (mm)		568×592×698	628×652×775	731×710×1,018	796×775×1,083
Shipping Weight (kg)		39	53	67	78
Power Consumption		159 W	169.9 W	292.9 W	420.5 W
Energy Consumption, at 37℃		34 Wh	41 Wh	63 Wh	99 Wh
, at 50℃		81 Wh	103 Wh	152 Wh	212 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz			

*** Other Specifications are available upon Customer's Request.**

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<*Continued From...*DAIHAN® SMART Gravity-air Incubator "ThermoStable™ SIG">

※ 운임 약 ₩ 25,000 별도!

Ordering Information

		Ea. Price, ₩
DH.SWIG03032	Incubator, Gravity, **230V, 32 Lit, "ThermoStable SIG-32"**	
DH.SWIG03050	**, 50 Lit, "ThermoStable SIG-50"**	
DH.SWIG03105	**, 105 Lit, "ThermoStable SIG-105"**	
DH.SWIG03155	**, 155 Lit, "ThermoStable SIG-155"**	
DH.SWIG04032	Incubator, Gravity, **120V, 32 Lit, "ThermoStable SIG-32"**	
DH.SWIG04050	**, 50 Lit, "ThermoStable SIG-50"**	
DH.SWIG04105	**, 105 Lit, "ThermoStable SIG-105"**	
DH.SWIG04155	**, 155 Lit, "ThermoStable SIG-155"**	

Spare PE-coated Steel Wire Shelf

		Ea. Price, ₩
DH.WIG11032	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 32 Lit, "IGS032"**, w280×d260mm	
DH.WIG11050	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 50 Lit, "IGS050"**, w340×d310mm	
DH.WIG11105	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 105 Lit, "IGS105"**, w455×d375mm	
DH.WIG11155	Wire Shelf, PE-coated Steel, with 2 Brackets, **for 155 Lit, "IGS155"**, w520×d440mm	

Optional Stainless-steel Wire Shelf

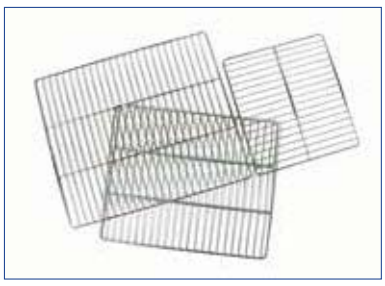
		Ea. Price, ₩
DH.WIG12032	Wire Shelf, Stainless-steel, with 2 Brackets, **for 32 Lit, "IGSN032"**, w280×d260mm	
DH.WON11050	Wire Shelf, Stainless-steel, with 2 Brackets, **for 50 Lit, "ONS050"**, w340×d310mm	
DH.WON11105	Wire Shelf, Stainless-steel, with 2 Brackets, **for 105 Lit, "ONS105"**, w455×d375mm	
DH.WON11155	Wire Shelf, Stainless-steel, with 2 Brackets, **for 155 Lit, "ONS155"**, w520×d440mm	

SMART Incubator with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.SWIG31032	Validation Service(IQ, OQ), with "SIG-32", **"SIGV032"**	
DH.SWIG31050	, with "SIG-50", **"SIGV050"**	
DH.SWIG31105	, with "SIG-105", **"SIGV105"**	
DH.SWIG31155	, with "SIG-155", **"SIGV155"**	

"ThermoStable SIG-105", SMART Gravity-air Incubator

Wire Shelf, PE-coated Steel (Included)



Wire Shelf, Stainless-steel (Optional)

DAIHAN WiRe™ App Service

4″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

Controlled by Smart-Phone

DAIHAN® Multi-Room Incubator "WIM", Forced-air, 125 Lit × 4 Rooms, with Certi. & Traceability, up to 60/70℃

With 8 Wire Shelf, Digital Fuzzy Control, Independent Chamber Control, Max. Temp. Uniformity & Accuracy

4-룸 배양기/인큐베이터, 강제 순환식, 디지털 퍼지 제어, 개별 컨트롤러 장착

Multi-Room Incubator, Forced-air, "WIM-R4"

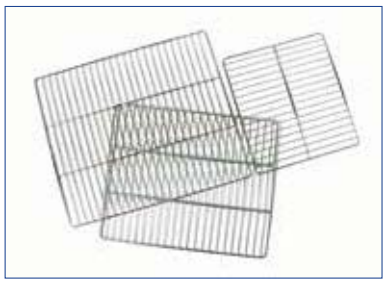
- ■ ***Made in Korea*** ■ ***UL/CUL Certified*** ■ ***CE Certified***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Patented Jog-Shuttle Control System*** ■ ***PL (Product Liability) Insurance***
- ∗ Variable Application : Microorganism Culture, Cell Culture, Constant Temp. Germination
- ∗ Each Chamber has an Independent Controller for Different Temp and Time Control
- ∗ Forced-air Flow by Silent Fan Motor Implements the Highest Uniformity of Temp in Each Chamber
- ∗ Storage Function for Set Values of Temperature and Time
- ∗ Stainless-steel Chamber and PE-coated Shelves (2ea for Each Chamber) - Corrosion Resistance
- ∗ Inner Tempered Glass Door : to Observe the Samples without Interruption of Incubation
- ∗ Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.
- ∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

※ 운임 약 ₩ 95,000 별도!

Spec. \ Model		(1) "WIM-4"	(2) "WIM-R4"	(3) "WIM-RL4" with illumination
Temp. Range		R/T +5℃~ 70℃	0℃ to 60℃	0℃ to 60℃
Circulation		Forced-air(Blower FAN)		
Capacity		125 Lit×4 Rooms		
Illumination		None		FRL 36W×2 (×4 Rooms)
Temp.	Accuracy	±0.2℃ at 37℃		
	Uniformity	±0.3℃ at 37℃, ±0.7℃ at 50℃	±0.5℃ at 37℃	
Heat-up Time		15 min. to 37℃ 30 min. to 50℃	20 min. to 37℃ 30 min. to 50℃	
Recovery Time (Door open 30sec)		8 min. to 37℃ 10 min. to 50℃	10 min. to 50℃ 12 min. to 50℃	
Heating / Compressor		500 W×4ea / None	650 W×4ea / 1/4 HP (×4 Rooms)	
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn & Push)		
Inner Door		with 4ea of Inner Tempered Glass Door		
Shelf		Included 8ea of PE-coated steel Shelf (2ea×4 Chambers)		
Permitted Total Load		Total Load 128 kg (16kg×8 Shelves)		
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector		
Material		Internal : Stainless-steel (#304), External : Powder Coated steel		
Dimension (w×d×h)	Interior (mm)	500×500×h500 mm (× 4 Rooms)		
	Exterior (mm)	1,655×845×h1,710 mm		
Net Weight / Gross Weight		343kg / 441kg	350kg / 450kg	
Packing Size (w×d×h) (mm)		1,900×1,050×1,950		
Power Consumption		2.6 kW	4.5 kW	4.8 kW
Power Supply*		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	1 Phase AC 120V, 60Hz or AC 230V,50/60Hz or 3 Phase	
Cat. No.	230V	DH.WIM04125	DH.WIM14125	DH.WIM24125
	120V	DH.WIM05125	DH.WIM15125	DH.WIM25125
	3Phase	-	DH.WIM16125	DH.WIM26125
Price, Each. ₩				

Wire Shelf, PE-coated steel (Included)



Wire Shelf, Stainless-steel (Optional)

Multi-Room Incubator with Validation (IQ, OQ) Service

Ea. Price, ₩

DH.WIM54125 Validation Service(IQ, OQ), with **"WIM-4"**, **"IMV525"**
DH.WIM64125 , with **"WIM-R4"**, **"IMV625"**
DH.WIM74125 , with **"WIM-RL4"**, **"IMV725"**

Spare PE-coated Steel Wire Shelf

Ea. Price, ₩

DH.WIM34125 Wire Shelf, PE-coated steel, with 2 Brackets, **"IMS125"** w470×d480mm, for **"WIM" 4-Room Incubator**

Optional Stainless-steel Wire Shelf

Ea. Price, ₩

DH.WIM34126 Wire Shelf, Stainless-steel, with 2 Brackets, **"IMS126"**, w470×d480mm, for **"WIM" 4-Room Incubator**

DAIHAN® Premium Compact-size Heating Block/Dry Bath Incubator "MaXtable™ H20"

With Large LCD Display, Fuzzy Control, Molded Heater, Modular Anodized Aluminum Blocks, up to 150℃, ±0.1℃

히팅 블럭, 디지털 퍼지 컨트롤 시스템, 터치버튼식 조절기, 일체형 주물 히터, 블럭 교체 가능, 블럭 추출용 공구 포함

Heating Block/Dry Bath "MaXtable™ H20-set"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Designed for Multi-functional Dry Block Heater*** ■ ***Ergonomic Design***
- ***Patented Jog-Dial and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate. with Large Back-Light LCD***
- ***With a Screw-type Block Removal Tool ; Convenient Handling***

* High-performance Molded Heater ensures Best Temperature Accuracy.
* Internal Bath Material(PPS) ensures Best Heat Insulation * Rapid heat up time.
* Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
* Precise Temperature Control : ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃
* User Self-Compensation Function to offset between Actual and Displayed Temperature. (±10.0℃)
* Digital Timer Included : up to 99hr 59min (Operation Time + Delay Time)
* Storage Function of Temperature and Timer setting values
* Convenient integral timer for time-sensitive incubations
* Alarm Function : Error Status and Timer-end * Easy to Read, Wide LCD Screen
* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
* Easily calibrated for accurate temperature control and display

Controller of "MaXtable™ H20"

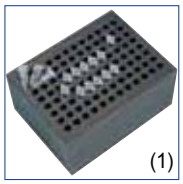
Included Block (3) "BLC 548" 48holes for 1.5/2ml & Removal Tool

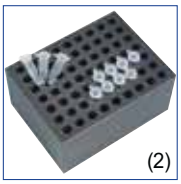
Specifications & Ordering information

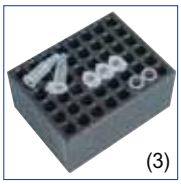
Spec. \ Model	"MaXtable™ H20" (Only Unit)	"MaXtable™ H20-set" (included Standard Block)
Controller	Single Digital Fuzzy Controller	
Useful Block	Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block	None(Only Heating Block Unit)	48 holes×for 1.5/ 2ml Centri. Tube
Heater	Molded Heater(300W)	
Dimension(mm) & Weight(kg)	Unit : 178×226×h138, Block : 90×120×h60	
Temp. Range, & Accuracy	Ambient +5℃ to 150℃, ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃	
Heat-Up Speed & Sensor	Approx. 5℃/min, PT100	
Safety Circuit	Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm	99hr 59min, Alarm (Error Status and Timer - end)	
Display	Digital LCD with Back-Light Function	
Material	Unit : PPS & BAS(HF380), Block : Anodized Aluminum	
Included Standard Acce.	Block Extraction Tool	
Packing Size & Gross Weight	230×290×h245 mm, 2.2 kg	230×355×h245 mm, 3.5 kg
Power Consumption	300 W	
Electric Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No. 230V	DH.WHB02000	DH.WHB02100
Cat. No. 120V	DH.WHB02001	DH.WHB02101
Price, Each. ₩		

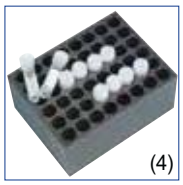
* Other Specifications are available upon Customer's Request.

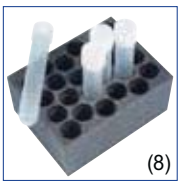
Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)

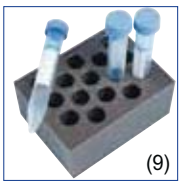


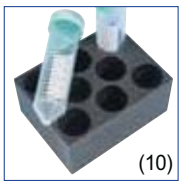












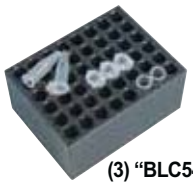
		Ea. Price, ₩
DH.WHB510596	(1) for 0.2ml PCR Tube, (Φ6×h16mm)×96 holes, **"BLC596"**	
DH.WHB510570	(2) for 0.5ml Centri. Tube, (Φ7.7×h29.5mm)×63 holes, **"BLC570"**	
DH.WHB511548	(3) for 1.5/2ml Centri. Tube, (Φ11×h35mm)×48 holes, **"BLC548"** (* included in the "H20-Set")	
DH.WHB521248	(4) for Φ12mm Test Tube, (Φ12×h35mm)×48 holes, **"BLT248"**	
DH.WHB521335	(5) for Φ13mm Test Tube, (Φ13×h47mm)×30 holes, **"BLT335"**	
DH.WHB521535	(6) for Φ15mm Test Tube, (Φ15×h47mm)×30 holes, **"BLT535"**	
DH.WHB521628	(7) for Φ16.5mm Test Tube, (Φ16.5×h47mm)×24 holes, **"BLT628"**	
DH.WHB521828	(8) for Φ18mm Test Tube, (Φ18×h47mm)×24 holes, **"BLT828"**	
DH.WHB531515	(9) for 15ml Conical Tube, (Φ16×h47mm)×15 holes, **"BLC515"**	
DH.WHB535008	(10) for 50ml Conical Tube, (Φ28.7×h47mm)×8 holes, **"BLC008"**	
DH.WHB500102	(11) **Spare ;** Block Removal Tool, Easy Handling	

DAIHAN® High-performance Heating Block/Dry Bath Incubator "HB-96D", Heating, Dual-type

With Fuzzy Control, Molded Heater, Modular Anodized Aluminum Blocks, Acrylic Lid, Touch-button Controller, up to 150℃, ±0.1℃

히팅 블럭, 디지털 퍼지 컨트롤 시스템, 듀얼 조절기/블럭, 일체형 주물 히터, 블럭 교체 가능, 아크릴 리드/ 블럭용 집게 포함

Heating Block/Dry Bath, Dual Control System
"HB-96D-set"



(3) "BLC548"

(11) "BLE101"

Included Anodized Aluminum Block & Tongs

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Designed for Multi-functional Dry Block Heater***
- ***Dual Controller & Block***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

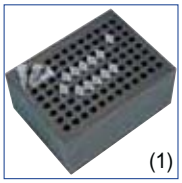
∗ Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
∗ Precise Temperature Control : ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃
∗ User Self-Compensation Function to offset between Actual and Displayed Temperature. (±10.0℃)
∗ Over Temperature & Over Current Protection and Sensor Error Detection
∗ Digital Timer Included : up to 99hr 59min (Operation Time + Delay Time)
∗ Storage Function of Temperature and Timer setting values ∗ Modular Block
∗ Alarm Function : Error Status and Timer-end ∗ Various kind of Blocks are offered (Optional)
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
∗ The Block Removal Tongs are Included for Easy Handling

Specifications & Ordering information

Spec. \ Model		"HB-96D" (Only Unit)	"HB-96D-set" (included Standard Block)
Controller		Dual Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	2×48 holes×for 1.5/ 2ml Centri. Tube
Heater		Molded Heater(300W)×2ea	
Dimension(mm)		Unit : 285×250×h155, Block : (90×120×h60)×2ea	
Temp. Range, & Accuracy		Ambient +5℃ to 150℃, ±0.1℃ at 37℃, ±0.2℃ at 90℃, ±0.4℃ at 135℃	
Heat-Up Speed & Sensor		Approx. 5℃/min, PT100	
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material		Unit : Stainless-steel (#304) & Powder Coated steel, Block : Anodized Aluminum	
Included Standard Acce.		Block Tongs "BLE101" and Block Cover	
Packing Size & Gross Weight		400×270×h200 mm, 6 kg	
Power Consumption		600 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WHB00198	DH.WHB00199
	120V	DH.WHB02198	DH.WHB02199
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)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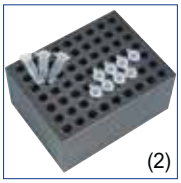
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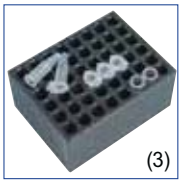
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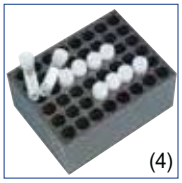
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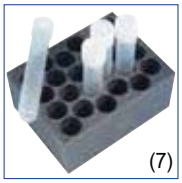
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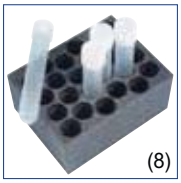
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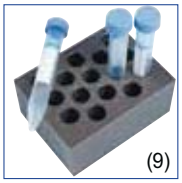
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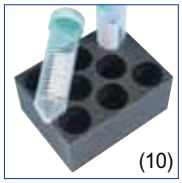
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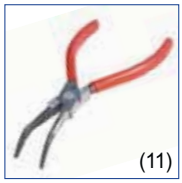
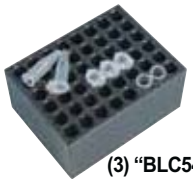

(11)

		Ea. Price, ₩
DH.WHB510596	(1) for 0.2ml PCR Tube, (Φ6×h16mm)×96 holes, **"BLC596"**	
DH.WHB510570	(2) for 0.5ml Centri. Tube, (Φ7.7×h29.5mm)×63 holes, **"BLC570"**	
DH.WHB511548	(3) for 1.5/2ml Centri. Tube, (Φ11×h35mm)×48 holes, **"BLC548"** (∗ included in the "HB-96D-Set")	
DH.WHB521248	(4) for Φ12mm Test Tube, (Φ12×h35mm)×48 holes, **"BLT248"**	
DH.WHB521335	(5) for Φ13mm Test Tube, (Φ13×h47mm)×30 holes, **"BLT335"**	
DH.WHB521535	(6) for Φ15mm Test Tube, (Φ15×h47mm)×30 holes, **"BLT535"**	
DH.WHB521628	(7) for Φ16.5mm Test Tube, (Φ16.5×h47mm)×24 holes, **"BLT628"**	
DH.WHB521828	(8) for Φ18mm Test Tube, (Φ18×h47mm)×24 holes, **"BLT828"**	
DH.WHB531515	(9) for 15ml Conical Tube, (Φ16×h47mm)×15 holes, **"BLC515"**	
DH.WHB535008	(10) for 50ml Conical Tube, (Φ28.7×h47mm)×8 holes, **"BLC008"**	
DH.WHB500101	(11) **Spare ;** Block Extraction Tongs, **"BLE101"**	

DAIHAN® High-performance Heating Block/Dry Bath Incubator-Heating & Cooling "HB-R48"

With Digital PID Control, Acrylic Lid, Precise Temperature Control, Modular Anodized Aluminum Block, −5℃~95℃, ±0.1℃ Peltier Cooling System, Digital Timer, Interchangeable Blocks, 히팅/쿨링 블럭, 블럭 교체 가능, 아크릴 리드/ 블럭용 집게 포함

"HB-R48-Set"
with Block "BLC548" for 1.5/2ml Centrifuge Tube×48 holes



(3) "BLC548"

(11) "BLE101"

Included Anodized Aluminum Block & Tongs

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Designed for Multi-Function : Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures.***
- ***Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function***

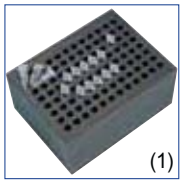
∗ User Self-Compensation Function to offset between Actual and Displayed Temperature. (±10.0℃)
∗ Storage Function of Temperature and Timer setting values
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

Spec. \ Model		"HB-R48" (Only Unit)	"HB-R48-set" (included Standard Block)
Controller		Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	48 holes×for 1.5/ 2ml Centri. Tube
Dimension : Unit & Block		185×230×h220mm, and 90×120×h60mm	
Cooling		Two Peltier Modules	
Cool-Down Speed		2.3℃/min. between 95℃ to 25℃, 0.5℃/min. between 25℃ to -5℃	
Heater and Sensor		300W (Molded Heater), PT100	
Temp. Range, & Accuracy		−5℃ to 95℃, and ±0.1℃ at 37℃, ±0.2℃ at 90℃	
Heat-Up Speed		Approx. 5℃/min	
Safety Device		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material	Internal & External	Stainless-steel (#304), and Powder Coated steel	
	Block	Anodized Aluminum	
Included Standard Acce.		Block Tongs "BLE101" and Block Cover	
Packing Size, Gross Weight		350×220×h310mm, 9 kg	
Power Consumption		450 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WHB00248	DH.WHB00249
	120V	DH.WHB02248	DH.WHB02249
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)



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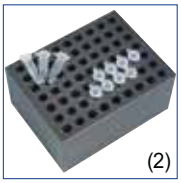

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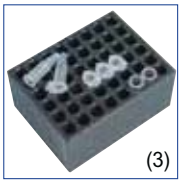

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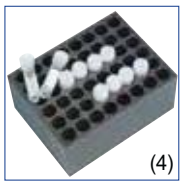

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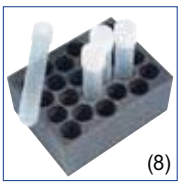

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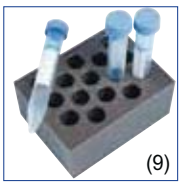

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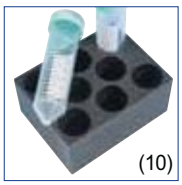

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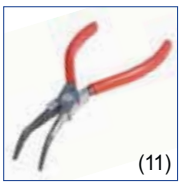


(11)

		Ea. Price, ₩
DH.WHB510596	(1) for 0.2ml PCR Tube, (Φ6×h16mm)×96 holes, **"BLC596"**	
DH.WHB510570	(2) for 0.5ml Centri. Tube, (Φ7.7×h29.5mm)×63 holes, **"BLC570"**	
DH.WHB511548	(3) for 1.5/2ml Centri. Tube, (Φ11×h35mm)×48 holes, **"BLC548"** (∗ included in the "HB-R48-Set")	
DH.WHB521248	(4) for Φ12mm Test Tube, (Φ12×h35mm)×48 holes, **"BLT248"**	
DH.WHB521335	(5) for Φ13mm Test Tube, (Φ13×h47mm)×30 holes, **"BLT335"**	
DH.WHB521535	(6) for Φ15mm Test Tube, (Φ15×h47mm)×30 holes, **"BLT535"**	
DH.WHB521628	(7) for Φ16.5mm Test Tube, (Φ16.5×h47mm)×24 holes, **"BLT628"**	
DH.WHB521828	(8) for Φ18mm Test Tube, (Φ18×h47mm)×24 holes, **"BLT828"**	
DH.WHB531515	(9) for 15ml Conical Tube, (Φ16×h47mm)×15 holes, **"BLC515"**	
DH.WHB535008	(10) for 50ml Conical Tube, (Φ28.7×h47mm)×8 holes, **"BLC008"**	
DH.WHB500101	(11) **Spare ;** Block Extraction Tongs, **"BLE101"**	

DAIHAN® SMART Precise Temp/Humidity Chamber "ThermoStable™ STH", 155 · 305 · 420 · 800 Lit

With Smart-Lab™, Auto Supplement Water Tank, Touch-Screen LCD, CFC-Free, −20℃ to 100℃, up to 98% RH, 스마트 항온항습기

SMART Precise Temp. / Humidity Chamber "ThermoStable™ STH-155"

※ −40~100℃ Upgrade Model Coming Soon!

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***CFC Free Refrigerant (R-404A)***
- ***Smart-Lab™ Controller : Controlled by Smart-Phone***
  - Ergonomic 7″ Full Touch Screen TFT LCD(Smart-Lab™ Controller)
  - WiRe™ App Service. - Internet Connectivity with WiFi
  - Self-Diagnostic Function - Automatic Data Recording
  - Push Alarm Service to Smart Phone : Power-/Temperature-/Door Open-Error Status
  - Built in USB port for Data Download and Program Upgrade
  - Password Protected Setting - Interactive Temperature Graph
  - Digital Calibration(Offset Function) - Min-/Max-Temperature Memory
  - Door Ajar and Power Failure Alarm - Program Function

∗ Precise Temperature Control (-40℃/-20℃ to 100℃) and Humidity (30% to 98% Relative Humidity)
∗ Electronic Humidity Sensor has Excellent Response Time and Durability.
∗ CFC-Free Refrigerant (R-404A) ∗ Low Water Level Alarm System
∗ The Powerful and Silent Dual Fan Motor Assures Temperature Uniformity by Strong Air Circulation (2 ~ 4pcs)
∗ Large Clear Viewing Window with Membrane Heating Element (Moisture-Proof)
∗ Sliding Water Supply Tank : Auto Water Supplementing System ∗ Easy and Safety Door Lock
∗ Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking
∗ 6 Channels & 2 Pens Temperature & Humidity Recorder(Optional)

Specification

Spec. \ Model		ThermoStable™ STH-155 Max. Capa. 155L	ThermoStable™ STH-305 Max. Capa. 305L	ThermoStable™ STH-420 Max. Capa. 420L	ThermoStable™ STH-800 Max. Capa. 800L
Temp. Range		−20℃ to 100℃			
Humidity Range		30% to 98% RH			
Compressor		7/8HP	1.5HP	1.5HP	3HP
Heater	for Temp.	1.5 kW	2.0 kW	2.2 kW	2.5 kW
	for Humi.	2.0 kW	3.0 kW	3.0 kW	3.0 kW
Spec. \ Model (Coming Soon)		ThermoStable™ STH-L155 Max. Capa. 155L	ThermoStable™ STH-L305 Max. Capa. 305L	ThermoStable™ STH-L420 Max. Capa. 420L	ThermoStable™ STH-L800 Max. Capa. 800L
Temp./Humidity Range		−40℃ to 100℃ / 30% to 98% RH			
Compressor		1.5HP	2 HP	3HP	4HP
Heater	for Temp.	1.5 kW	2.0 kW	2.2 kW	2.5 kW
	for Humi.	2.0 kW	3.0 kW	3.0 kW	3.0 kW
Dimension (w×d×h)	Interior (mm)	505×505×610	620×620×800	700×700×820	1,000×800×1,000
	Exterior (mm)	1,100×960×1,550	1,310×1,080×1,765	1,390×1,135×1,690	1,570×1,245×2,060
Capacity		155 Lit	305 Lit	420 Lit	800 Lit
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Temp.	Accuracy	±0.3℃			
	Stability	±0.3℃			
Humidity	Accuracy	±0.3% RH			
	Stability	±0.3% RH at 70%			
Heat-up Time		35 min (−20℃ to 80℃)			
Cool-down Time		45 min (+20℃ to −20℃)			
Controller & Display		Smart-Lab Controller, 7″ Full Touch Screen TFT LCD			
Program Function		Multiple Programs(Patterns by multiple Segments) Supported			
Sensor		PT100 & Capacitive Sensor			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
Shelf		3ea of Perforated Stainless-steel Shelf of Adjustable Position			
Safety Device		Over Temp. and Over Current Protector, Sensor Error and Low Level Detector, Leakage Breaker			
Packing Dimension (w×d×h) (cm)		134×116×175	152×125×207	160×130×202	178×141×237
Gross Weight		353 kg	369 kg	478 kg	678 kg
Power Consumption		4.7 kW	5.7 kW	6.3 kW	9 kW
		6.2 kW	7.9 kW	9.9 kW	12.7 kW
Electric Reqts.		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 95,000 별도!

<Continued On Next Page>

<*Continued From...* DAIHAN® SMART Precise Temp/Humidity Chamber, "ThermoStable™ STH">

Ordering Information

※ 운임 약 ₩ 70,000 별도!

(1) Programmable Temp./Humidity Chamber, 1 Phase

		Ea. Price, ₩
DH.STH01155	Temp. / Humidity Chamber, **"STH-155"**, −20℃ to 100℃, 155 Lit, **230V**	
DH.STH01305	, **"STH-305"**, −20℃ to 100℃, 305 Lit, **230V**	
DH.STH01420	, **"STH-420"**, −20℃ to 100℃, 420 Lit, **230V**	
DH.STH01800	, **"STH-800"**, −20℃ to 100℃, 800 Lit, **230V**	
DH.STH02155	Temp. / Humidity Chamber, **"STH-L155"**, −40℃ to 100℃, 155Lit, **230V**	
DH.STH02305	, **"STH-L305"**, −40℃ to 100℃, 305Lit, **230V**	
DH.STH02420	, **"STH-L420"**, −40℃ to 100℃, 420Lit, **230V**	
DH.STH02800	, **"STH-L800"**, −40℃ to 100℃, 800Lit, **230V**	
DH.STH05155	Temp. / Humidity Chamber, **"STH-155"**, Same as Above, but only **120V**	
DH.STH05305	, **"STH-305"**, Same as Above, but only **120V**	
DH.STH05420	, **"STH-420"**, Same as Above, but only **120V**	
DH.STH05800	, **"STH-800"**, Same as Above, but only **120V**	
DH.STH06155	Temp. / Humidity Chamber, **"STH-L155"**, Same as Above, but only **120V**	
DH.STH06305	, **"STH-L305"**, Same as Above, but only **120V**	
DH.STH06420	, **"STH-L420"**, Same as Above, but only **120V**	
DH.STH06800	, **"STH-L800"**, Same as Above, but only **120V**	

(2) Programmable Temp./Humidity Chamber, 3Phase, for Customizing

		Ea. Price, ₩
DH.STH07155	Temp. / Humidity Chamber, **"STH-155"**, −20℃ to 100℃, 155 Lit	
DH.STH07305	, **"STH-305"**, −20℃ to 100℃, 305 Lit	
DH.STH07420	, **"STH-420"**, −20℃ to 100℃, 420 Lit	
DH.STH07800	, **"STH-800"**, −20℃ to 100℃, 800 Lit	
DH.STH08155	Temp. / Humidity Chamber, **"STH-L155"**, −40℃ to 100℃, 155Lit	
DH.STH08305	, **"STH-L305"**, −40℃ to 100℃, 305Lit	
DH.STH08420	, **"STH-L420"**, −40℃ to 100℃, 420Lit	
DH.STH08800	, **"STH-L800"**, −40℃ to 100℃, 800Lit	

Spare Perforated Stainless-steel Shelf

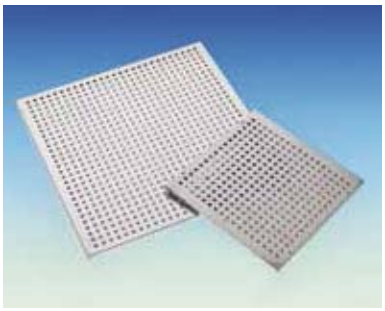
		Ea. Price, ₩
DH.WTH11155	Perforated Shelf, Stainless-steel, **"THS1155"**, for 155 Lit, w470×d480mm	
DH.WTH11305	, **"THS1305"**, for 305 Lit, w590×d580mm	
DH.WTH11420	, **"THS1420"**, for 420 Lit, w720×d640mm	
DH.WTH11800	, **"THS1800"**, for 800 Lit, w970×d980mm	

Optional Temp & Humidity Recorder and Chart Paper

		Ea. Price, ₩
DH.WTH05100	Temperature & Humidity Recorder, **"WTH5100"**	
DH.WTH05105	Chart Paper, **"WTH5105", 33 Days**	

Programmable Temp./Humidity Chamber with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.STH31155	Validation Service(IQ, OQ), with **"STH-155"**, **"STHV1155"**	
DH.STH31305	, with **"STH-305"**, **"STHV1305"**	
DH.STH31420	, with **"STH-420"**, **"STHV1420"**	
DH.STH31800	, with **"STH-800"**, **"STHV1800"**	
DH.STH32155	Validation Service(IQ, OQ), with **"STH-L155"**, **"STHV2155"**	
DH.STH32305	, with **"STH-L305"**, **"STHV2305"**	
DH.STH32420	, with **"STH-L420"**, **"STHV2420"**	
DH.STH32800	, with **"STH-L800"**, **"STHV2800"**	



Perforated Stainless-steel Shelf (Included)

Auto Water Supplementing System

Temp. & Humidity Recorder 6 Channel 2 Pens(WTH5100) (Optional)

>> DAIHAN WiRe™ App Service

7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

Controlled by Smart-Phone

DAIHAN® General Purpose SMART Temp/Humidity Chamber "ThermoStable™ STH-E", 155 · 305 · 420 · 800 Lit

With Smart-Lab™ System, Water Tank, Touch-Screen LCD, CFC-Free, −20℃~80℃ ±0.3 ℃, up to 95% RH, 스마트 항온항습기

SMART Temp./Humidity Chamber "ThermoStable™ STH-E"

- ■ *Made in Korea* ■ *PL(Product Liability) Insurance*
- ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*
- ■ *Economical & Practical Type* ■ *CFC Free Refrigerant (R-404A)*
- ■ *Smart-Lab™ Controller : Remote Controlled by Smart-Phone with WiRe™ App Service*
  - Ergonomic 7″ Full Touch Screen TFT LCD - Internet Connectivity with WiFi
  - RS232 Interface for Remote Monitoring and Controlling with PC
  - Built in USB port for Data Download and Program Upgrade - Password Protected Setting
  - Variable Program Setting for Multiple Patterns with Multiple Segments
  - Self-Diagnostic Function (Push Alarm to Smart Phone) : Door Ajar and Power-/Temp.-Failure Alarm
  - Min-/Max-Temperature Memory and Automatic Data Recording
  - Interactive Temperature Graph - Digital Calibration (Offset Function)
- ∗ The Powerful and Silent Dual Fan Motor Assures Temperature Uniformity by Strong Air Circulation
- ∗ Over Temperature and Over Current Protection for User Safety
- ∗ Inner Tempered Glass Door with Silicon Packing ∗ Low Water Level Alarm Lamp
- ∗ Temperature & Humidity Recorder (6 Channels & 2Pens) (Optional)

Specifications & Ordering information

※ 운임 약 ₩ 70,000 별도!

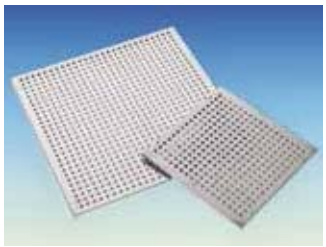
Spec. \ Model		ThermoStable™ STH-E155 Max. Capa. 155L	ThermoStable™ STH-E305 Max. Capa. 305L	ThermoStable™ STH-E420 Max. Capa. 420L	ThermoStable™ STH-E800 Max. Capa. 800L
Capacity		155 Lit	305 Lit	420 Lit	800 Lit
Temp.	Range	PT100 Sensor, −20℃ ~ +80℃			
	Accuracy	±0.3℃ (Stability ±1.0 ℃)			
Humidity	Range	30% ~ 95% RH			
	Accuracy	±2% (Stability ±3% RH)			
Dimension (w×d×h)	Interior (mm)	505×505×610	620×620×800	750×660×850	1000×800×1000
	Exterior (mm)	745×920×1645	820×1290×1720	990×1075×1885	1200×1100×1920
Heater	for Temp.	1.5 kW	2.0 kW	2.2 kW	2.5 kW
	for Humi.	2.0 kW	3.0 kW	3.0 kW	3.0 kW
Compressor		7/8HP	1.5 HP	1.5 HP	3 HP
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Controller & Display		Smart-Lab Controller, 7″ Full Touch Screen TFT LCD			
Program Function		Multiple Programs(Patterns by multiple Segments) Supported			
Material		Internal : Stainless-steel(#304), External : Powder Coated steel			
Shelf (included)		3ea of Perforated Stainless-steel Shelf of Adjustable Position			
Safety Device		Hi-Low Temp. Protector, Over Current & Leakage Breaker, Water Level Sensor			
Others		PL(Product Liability) Insurance			
Packing Dimension (w×d×h) (cm)		99×112×185	122×122×205	128×128×216	149×132×220
Net & Gross Weight, kg		290 kg, 355 kg	309 kg, 369 kg	378 kg, 478 kg	558 kg, 678 kg
Power Consumption		4.4 kW	5.7 kW	6.3 kW	8.2 kW
Electric Reqts.		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			
Cat. No.	230V	DH.STHE0155	DH.STHE0305	DH.STHE0420	DH.STHE0800
	120V	DH.STHE4155	DH.STHE4305	DH.STHE4420	DH.STHE4800
	3Phase	DH.STHE5155	DH.STHE5305	DH.STHE5420	DH.STHE5800
Price, Each. ₩					

>> DAIHAN WiRe™ App Service

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)

Controlled by Smart-Phone



(1) Perforated Stainless-steel Shelf (Included)

(2) Temp. & Humidity Recorder 6 Channel 2 Pens (WTH5100) (Optional)

Validation (IQ, OQ) Service Economic Temp./Humidity Chamber

		Ea. Price, ₩
DH.STHE3155	Validation Service(IQ, OQ), with "STH-E155", **"STHEV155"**	
DH.STHE3305	, with "STH-E305", **"STHEV305"**	
DH.STHE3420	, with "STH-E420", **"STHEV420"**	
DH.STHE3800	, with "STH-E800", **"STHEV800"**	

Spare Perforated Stainless-steel Shelf

		Ea. Price, ₩
DH.WTH11155	(1) Perforated Shelf, **"THS1155"**, for 155 Lit, 470×480mm	
DH.WTH11305	, **"THS1305"**, for 305 Lit, 590×580mm	
DH.WTH11420	, **"THS1420"**, for 420 Lit, 720×640mm	
DH.WTH11800	, **"THS1800"**, for 800 Lit, 970×980mm	

Optional Temp & Humidity Recorder and Chart Paper

		Ea. Price, ₩
DH.WTH05100	(2) Temperature & Humidity Recorder, **"WTH5100"**	
DH.WTH05105	Chart Paper, **"WTH5105", 33 Days**	

Articles	Cat. No	Description

DAIHAN® SMART Low Temperature(B.O.D) Incubator "ThermoStable™ SIR", 150 · 250 · 420 · 700 Lit

With Smart-Lab™ Controller, 4″ Full Touch Screen, Fuzzy-PID Control, CFC-free(R-404A), 0~60℃, ±0.2℃, with Certi. & Traceability

스마트 저온(B.O.D) 배양기/인큐베이터, 강제 순환식, 우수한 온도정확성, 친환경 냉매 채용, WiRe™서비스, 4인치 풀터치스크린 조절기

SMART Low Temperature(B.O.D) Incubator "ThermoStable™ SIR-150"

- ■ *Made in Korea* ■ *UL / CUL Certified*
- ■ *CE Certified* ■ *PL (Product Liability) Insurance*
- ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*
- ■ *Air Flow ; Forced Air-type* ■ *CFC-free (R-404A) Refrigeration System*
- ■ *Digital Fuzzy Control System Implementing Superior Temperature Accuracy*
- ■ *Smart-Lab™ Controller : Remote Controlled by Smart-Phone with WiRe™ App Service*
  - Ergonomic 4″ Full Touch Screen TFT LCD - Internet Connectivity with WiFi
  - RS232 Interface for Remote Monitoring and Controlling with PC - Automatic Data Recording
  - Built in USB port for Data Download and Program Upgrade - Self-Diagnostic Function
  - Variable Program Setting for Multiple Patterns with Multiple Segments

∗ Variable Application : Animal/Plant Cell Culture, Constant Temp. Germination Test, BOD Test, etc.
∗ Stainless-steel Chamber and PE-coated Shelves ∗ Compact New Body Design
∗ Intelligent Control of Refrigerator for Preventing Overload of Compressor
∗ Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.

Specifications & Ordering information

※ 운임 약 ₩ 50,000 별도!

Spec. \ Model		ThermoStable™ SIR-150 Max. Capa. 155L	ThermoStable™ SIR-250 Max. Capa. 250L	ThermoStable™ SIR-420 Max. Capa. 420L	ThermoStable™ SIR-700 Max. Capa. 700L
Capacity		150 Lit	250 Lit	420 Lit	700 Lit
Temp. Range & Accuracy		0℃ ~ 60℃, ± 0.2℃ at 37℃			
Temp. Uniformity & Sensor		±0.5℃ at 37℃, ±1.4℃ at 50℃, PT100 Sensor			
Heat-up Time		20 min. to 37℃ 20 min. to 50℃		35 min. to 37℃ 35 min. to 50℃	
Recovery Time (Door open 30sec)		10 min. to 37℃ 12 min. to 50℃		12 min. to 37℃ 15 min. to 50℃	
Heating Power/Consumption		700 W	1 kW	1.2 kW	2 kW
Compressor		1/4HP	1/3HP	1/2HP	1/2HP
Compressor Control		Intelligent Control of Refrigerator for preventing Overload of Compressor			
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end			
Display & Controller		4″Full Touch Screen TFT LCD, Smart-Lab™ Controller			
Inner Door		with 1ea of Inner Tempered Glass Door			
Shelf		Included 3ea of PE-coated steel Shelf			
Permitted		Total Load Total Load : 48 kg (16kg×3 Shelf)			
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector			
Material		Internal : Stainless-steel (#304), External : Powder Coated steel			
Dimension (w×d×h)	Interior (mm)	505×505×610	505×505×1,000	705×605×1,000	800×700×1,250
	Exterior (mm)	640×832×1,313	640×832×1,703	840×932×1,753	935×1,027×2,000
Net Weight / Gross Weight		118 kg / 191 kg	157 kg / 217 kg	202 kg / 277 kg	234 kg / 313 kg
Packing Size (w×d×h) (mm)		900×1,000×1,650	900×1,000×2,040	1,100×1,100×2,140	1,220×1,220×2,260
Power Consumption		1.6 kW	1.8 kW	2.3 kW	2.4 kW
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz			
Cat. No.	230V	DH.SWIR03150	DH.SWIR03250	DH.SWIR03420	DH.SWIR03700
	120V	DH.SWIR04150	DH.SWIR04250	DH.SWIR04420	DH.SWIR04700
Price, Each. ₩					

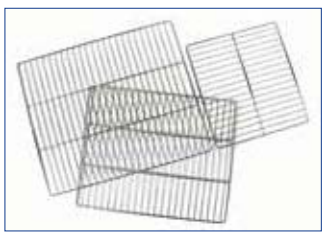
DAIHAN WiRe™ App Service

4″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

Controlled by Smart-Phone

(1) Wire Shelf PE Coated steel (Included)



(2) Wire Shelf Stainless-steel (Optional)

Validation (IQ, OQ) Service Low Temp(B.O.D) Incubator

		Ea. Price, ₩
DH.SWIR31150	Validation Service(IQ, OQ), with "ThermoStable SIR-150", **"SIRV150"**	
DH.SWIR31250	, with "ThermoStable SIR-250", **"SIRV250"**	
DH.SWIR31420	, with "ThermoStable SIR-420", **"SIRV420"**	
DH.SWIR31700	, with "ThermoStable SIR-700", **"SIRV700"**	

Spare PE-coated Steel Wire Shelf

		Ea. Price, ₩
DH.WIR11150	(1) Wire Shelf, **"IRS150"**, 470×480mm, for **"SIR-150", "SIR-250"**	
DH.WIR11420	, **"IRS420"**, 675×585mm, for **"SIR-420"**	
DH.WIR11700	, **"IRS700"**, 770×680mm, for **"SIR-700"**	

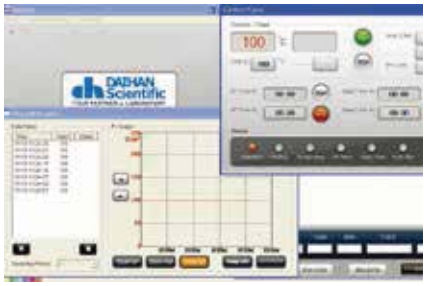
Optional Stainless-steel Wire Shelf

		Ea. Price, ₩
DH.WIR21150	(2) Wire Shelf, **"IRU150"**, 470×480mm, for **"SIR-150", "SIR-250"**	
DH.WIR21420	, **"IRU420"**, 675×585mm, for **"SIR-420"**	
DH.WIR21700	, **"IRU700"**, 770×680mm, for **"SIR-700"**	

DAIHAN® Low Temperature(B.O.D) Incubator "ThermoStable™ IR", Class-I Medical Device(NIDS), 0~60℃, ±0.2℃
With 3 Wire Shelf, Digital PID Control, CFC-free Refrigeration(R-404A) System, Forced-air, 150 · 250 · 420 · 700 Lit

저온(B.O.D) 배양기/인큐베이터, 강제 순환식, 우수한 온도정확성, 친환경 냉매 채용

Low Temperature(B.O.D) Incubator
"ThermoStable™ IR-150"



WiseRemote Control Software :

Connection of Temperature Devices
with Interface RS232C to a PC
Export Recorded Data(Excel Spreadsheet)

* You can Download this Software from
DAIHAN-Sci.com Shopping-mall

- ***Made in Korea*** ■ ***UL / CUL Certified*** ■ ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Intelligent Control of Refrigerator for Preventing Overload of Compressor***
- ***CFC-free (R-404A) Refrigeration System***
- ***Digital PID Control System Implementing Superior Temperature Accuracy***
- ***Patented Jog-Dial Control System*** ■ ***PL (Product Liability) Insurance***

* Variable Application : Animal & Plant Cell Culture, Constant Temperature, Germination Test, BOD Test, and so on
* RS232C Interface for Monitoring and Controlling with PC
* Superior Temperature Uniformity by Forced-air
* Stainless-steel Chamber and PE-coated Shelves
* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.
* Storage Function : Alarm & Timer * Back-Light LCD
* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
* CFC-free (R-404A) Refrigeration System. * Compact New Body Design

Specifications & Ordering information

Spec. \ Model		ThermoStable™ IR-150 Max. Capa. 150L	ThermoStable™ IR-250 Max. Capa. 250L	ThermoStable™ IR-420 Max. Capa. 420L	ThermoStable™ IR-700 Max. Capa. 700L
Capacity		**150 Lit**	**250 Lit**	**420 Lit**	**700 Lit**
Air Flow-type		Forced-air Type			
Temp. Range & Accuracy		0℃ ~ 60℃, ± 0.2℃ at 37℃			
Temp. Uniformity & Sensor		±0.5℃ at 37℃, ±1.4℃ at 50℃, PT100 Sensor			
Heat-up Time		20 min. to 37℃ 20 min. to 50℃		35 min. to 37℃ 35 min. to 50℃	
Recovery Time (Door open 30sec)		10 min. to 37℃ 12 min. to 50℃		12 min. to 37℃ 15 min. to 50℃	
Heating Power/Consumption		700 W	1 kW	1.2 kW	2 kW
Compressor		1/4HP	1/3HP	1/2HP	1/2HP
Compressor Control		Intelligent Control of Refrigerator for preventing Overload of Compressor			
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end			
Display		Digital LCD with Back Light			
Controller		Digital PID Controller with Jog-Shuttle Switch (Turn & Push)			
Inner Door		with 1ea of Inner Tempered Glass Door			
Shelf		Included 3ea of PE-coated steel Shelf			
Permitted Total Load		Total Load : 48 kg (16kg×3 Shelf)			
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector			
Material		Internal : Stainless-steel (#304), External : Powder Coated steel			
Dimension (w×d×h)	Interior (mm)	505×505×610	505×505×1,000	705×605×1,000	800×700×1,250
	Exterior (mm)	640×832×1,313	640×832×1,703	840×932×1,753	935×1,027×2,000
Net Weight		118 kg	157 kg	202 kg	234 kg
Packing Size (w×d×h) (mm) & Gross Weight		900×1,000×1,650 191 kg	900×1,000×2,040 217 kg	1,100×1,100×2,140 277 kg	1,220×1,220×2,260 313 kg
Power Consumption		1.6 kW	1.8 kW	2.3 kW	2.4 kW
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz			
Cat. No.	230V	**DH.WIR03150**	**DH.WIR03250**	**DH.WIR03420**	**DH.WIR03700**
	120V	**DH.WIR04150**	**DH.WIR04250**	**DH.WIR04420**	**DH.WIR04700**
Price, Each. ₩					

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 50,000 별도!

<Continued On Next Page>

<*Continued From...* DAIHAN® Low Temperature(B.O.D) Incubator "ThermoStable™ IR">

Spare PE-coated Steel Wire Shelf

Ea. Price, ₩

DH.WIR11150 Wire Shelf, PE Coated steel, **"IRS150"**, w470×d480mm, for **"IR-150"**, **"IR-250"**
DH.WIR11420 Wire Shelf, PE Coated steel, **"IRS420"**, w675×d585mm, for **"IR-420"**
DH.WIR11700 , **"IRS700"**, w770×d680mm, for **"IR-700"**

Optional Stainless-steel Wire Shelf

Ea. Price, ₩

DH.WIR21150 (1) Wire Shelf, Stainless-steel, **"IRU150"**, w470×d480mm, for **"IR-150"**, **"IR-250"**
DH.WIR21420 (1) Wire Shelf, Stainless-steel, **"IRU420"**, w675×d585mm, for **"IR-420"**
DH.WIR21700 , **"IRU700"**, w770×d680mm, for **"IR-700"**

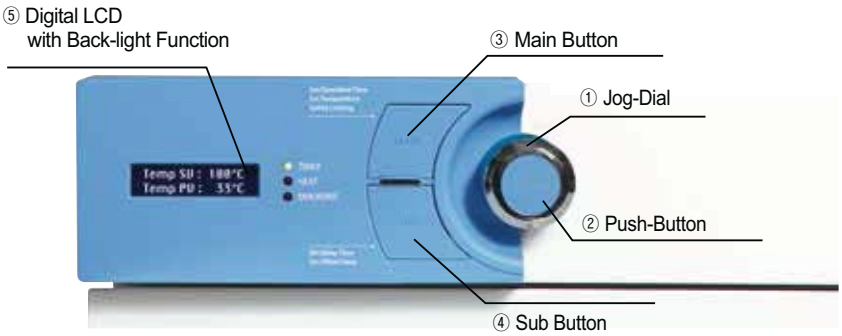
Low Temp(B.O.D) Incubator with Validation (IQ, OQ) Service

Ea. Price, ₩

DH.WIR31150 Validation Service(IQ, OQ), with "ThermoStable IR-150", **"IRV150"**
DH.WIR31250 , with "ThermoStable IR-250", **"IRV250"**
DH.WIR31420 , with "ThermoStable IR-420", **"IRV420"**
DH.WIR31700 , with "ThermoStable IR-700", **"IRV700"**

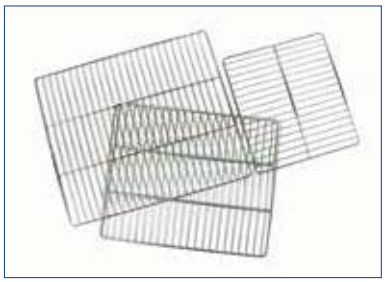
Low Temperature(B.O.D) Incubator "ThermoStable IR-150"

New Jog-Dial Controller



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

Wire Shelf, PE Coated steel (Included)



(1) Wire Shelf, Stainless-steel (Optional)

DAIHAN® SMART Plant Growth Chamber "ThermoStable™ GC", Smart-Lab™ System, 432 · 864 Lit

With Smart-Lab™ Controller, CFC-Free, 0~12,000 - or 15,000-Lux, 30~95% RH, 10~60℃, with Certi. & Traceability

스마트 식물 생장상, 스마트랩 컨트롤러, 정밀한 온도/습도/조절, WiRe™서비스, 7인치 풀터치스크린 스마트랩 조절기

(1) SMART Plant Growth Chamber "ThermoStable™ GC-450"

Main Display of Smart-Lab™ Controller

Graph Display of Smart-Lab™ Controller

Program Set Display of Smart-Lab™ Controller

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Suitable for Plant Growth, Stability, Product Self-life QC Testing***
- ***Ergonomic Screen Design 7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller) : Controlled by Smart-Phone***
- ***WiRe™ App Service.*** ■ ***Automatic Data Recording***
- ***Self-Diagnostic Function***
- ***Variable Program Setting for Multiple Patterns with Multiple Segments***
- ***The Recorded Data could be transferred to PC by USB memory***
- ***Controller SW can be upgraded through USB port.***

∗ Inner Tempered Glass Door with Silicone Packing offers easy Observation without Door Opening
∗ Humidity Control by Capacitive Humidity Sensor provides Accurate Control from 30 to 95%RH
∗ Smart-Lab™ Controller Provides Precise Temperature, Relative Humidity and Illumination Control
- Maintain Uniformity and Accuracy of Growth Circumstance
∗ 3-/4- Side Light Bank System : Intensity of Light is controlled by 8-levels and Displayed on LCD
∗ Over Temperature & Over Current Protection, Sensor Error Detection, Leakage Breaking

Specification

Spec. \ Model		(1) "ThermoStable™ GC-450" Max. Capa. 432 Lit	(2) "ThermoStable™ GC-1000" Max. Capa. 864 Lit
Capacity		**432 Lit**	**864 Lit**
Temp.	**Range & Variation**	10℃ ~ 60℃, ±1℃ at 20℃	
	Fluctuation	± 0.5℃ at 10℃, ± 0.5℃ at 25℃ (0% light intensity) ± 1℃ at 10℃, ± 1℃ at 25℃ (100% light intensity)	
Humidity	**Range & Variation**	30% ~ 95% RH, ±3% at 60℃	
	Fluctuation	±1%	
	Humidifier	Evaporation by Fan with Heater	
Illumination	**Range**	0 to 12,000 Lux	0 to 15,000 Lux
	Lamp	FPL 55W×14	FPL 55W×28
	Bank	3 Side Walls	
Temp. & Humidity Sensor		Temp. : PT100, Humidity : Capacitive Sensor	
Heat-up Time (up to 37℃)		11 min. (0 % illumination) / 9 min. (100 % illumination)	
Cool-down Time (down to 10℃)		13 min. (0 % illumination) / 15 min. (100 % illumination)	
Temp. Recovery (After Door was opened for 30sec)		3 min. at 10℃, 1 min. at 37℃ (0 % illumination) 5 min. at 10℃, 1min. at 37℃ (100 % illumination)	
Heating Power /Consumption	**for Temp.**	1.5 kW	3.0 kW
	for Humi.	1.5 kW	3.0 kW
Compressor		1/2HP	1HP
Refrigerant		CFC-Free(R-404A) Refrigeration System	
Display		7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)	
Controller		Smart-Lab™ Controller	
Program Function		Temperature and Humidity : 120 Patterns, 1,200 Segments Light Bank : 7 steps	
Door	**Internal**	Tempered Safety Glass with Silicon Packing	
	External	3-Side Magnetic Packing Door with Light Bank	
Shelf		4×PE-coated Steel Shelf	8×PE-coated Steel Shelf
Permitted Total Load		64 kg (16kg×4 Shelves)	128 kg (16kg×8 Shelves)
Safety Circuit		Over Temp Protector, Over Current & Leakage Breaker	
Material		Internal : Stainless-steel (#304), External : Power Coated steel	
Dimension (w×d×h)	**Interior (mm)**	650×700×1,050	1,200×790×1,050
	Exterior (mm)	850×1,090×1,965	1,400×1,150×1,965
Packing Size & Gross Weight		1,400×1,220×h2,210mm, 435 kg	1,600×1,500×h2,200mm, 585 kg
Power Consumption		4.8 kW	6.5 kW
Power Supply*		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase	

∗ Other Specifications are available upon Customer's Request.

<Continued On Next Page>

<*Continued From...*DAIHAN® SMART Plant Growth Chamber "ThermoStable™ GC">

Ordering Information

※ 운임 약 ₩ 90,000 별도!

(1) 432 Lit Plant Growth Chamber "ThermoStable™ GC-450", 0~12,000 Lux

Ea. Price, ₩

DH.SWGC00450* Plant Growth Chamber, **230V, "ThermoStable GC-450"**
DH.SWGC50450* , **120V, "ThermoStable GC-450"**
DH.SWGC60450* , **3 Phase, "ThermoStable GC-450"**

(2) 864 Lit Plant Growth Chamber "ThermoStable™ GC-1000", 0~15,000 Lux

Ea. Price, ₩

DH.SWGC01000* Plant Growth Chamber, **230V, "ThermoStable GC-1000"**
DH.SWGC61000* , **3 Phase, "ThermoStable GC-1000"**

*-marks : Included Water Tank(with Silicon Tube) and Lux Meter

Spare Wire Shelf, PE Coated steel

Ea. Price, ₩

DH.WGC10450 Wire Shelf, PE Coated, w640×d620mm, **"GCS450",** for **432Lit**
DH.WGC11000 , w580×d620mm, **"GCS1000",** for **864Lit**

Validation (IQ, OQ) Service

Ea. Price, ₩

DH.SWGC30450 Validation Service(IQ, OQ), with "ThermoStable GC-450", **"SGCV450"**
DH.SWGC31000 , with "ThermoStable GC-1000", **"SGCV1000"**

(1) SMART Plant Growth Chamber "ThermoStable™ GC-450"

DAIHAN WiRe™ App Service

7″ Full Touch Screen TFT LCD
(Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

Controlled by Smart-Phone

Wire Shelf, PE-coated steel (Included)

Water Tank/Silicon Tube/Lux Meter (Included)

Articles	Cat. No	Description

DAIHAN® 4~45℃ & 0~10% CO_2 20Lit Mini CO_2 Incubator & CO_2 Shaking Incubator, "ThermoStable™ IC-20 & ICS-20"

Programmable PID Controlled 0.1℃ & 0.1%, Compact Design for Saving Space/Money, Ideal for Cell/Tissue Culture NEW

With Cooling/Heating system of Peltier Element/Auto-Tuning/Safety Device, 저온 미니 CO_2 배양기 & CO_2 진탕 배양기

A. 20Lit Mini CO_2 Incubator "ThermoStable™ IC-20" Including CO_2 Gas Cylinder & Regulator

Figure; Assembly CO_2 Shaking Incubator
You can easily connect the Incubator & Shaker

B. "ICS-20" CO_2 Shaking Incubator Set

C. "SHO-1DI" Separable Orbital Shaker
; It can be Used Individually and Be Accepted

A. Standard CO_2 Incubator "ThermoStable™ IC-20"
Including CO_2 Regulator & CO_2 Aluminum Cylinder

B. Assembly CO_2 Shaking Incubator Package Set "ThermoStable™ ICS-20"
= Standard CO_2 Incubator "IC-20" + Orbital Shaker "SHO-1DI"

C. Multiuse Digital Orbital Motion Shaker "SHO-1DI" : Can Be Used Individually.
"SHO-1DI" is same with existing Orbital Shaker "SHO-1D" except Platform, and can be Accepted Optional Various Platforms ; See the Shaker Section

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance*** ■ ***2-Year Warranty***
- ***Applications : Cell/Tissue Culture & Transfer, Embryo/Microorganism Culture***
- ***NDIR CO_2 Sensor : Dual Wavelength Type***
  Rapid Initial Response Time, not Affected by User Environment
- ***ABS-Resin Chamber & Housing : Light-weight/Compact Design***
  Good for Money & Space Saving and Personal Use.
- ***Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-Information, and Traceable Data Base System.***

∗ Cooling/Heating System of PELTIER ELEMENT :
- Cooling and Heating by using Thermoelectric Semiconductor Element
- Minimizes Noise(<20dB) and Power Consumption

∗ Auto-Tuning : Rapid Response and High Stability According to the Thermal Properties and the Rate of Thermal Response of the Object

∗ Safety Device : Over Temperature & Over Current Protection, Sensor Error Detection

∗ 4-Connection Device to Join a Shaker "SHO-1DI" in the Bottom outside of the CO_2 Incubator "IC-20"

Specifications & Ordering Information

Spec. \ Model		A. CO_2 Standard Incubator "ThermoStable™ IC-20"	B. CO_2 Shaking Incubator Set "ThermoStable™ ICS-20"
Capacity (Lit)		20Lit Working Chamber	
Temp. Range Accuracy Uniformity		4 ~ 45℃, 0.1℃; Digital PID Control ±0.2℃(No Load) ±0.2℃(at 37℃)	
CO_2 Range & Control		0 ~ 10%, 0.1% ; NDIR CO_2 Sensor	
Cooling/Heating		Peltier Element Module	
Air Flow-type		Gravity Flow Circulation	
1 Shelf and 3 Location Brackets		1 Perforated ABS Shelf(w210×d230×Thick 8mm) included Adjustable Shelf Location Height of 3-Stage	
Condensate Drain		Natural Evaporation	
Incubator Material		"ABS-Resin" Chamber & Housing, Except Shaking Base	
Incubator Dimension	Interior	w213×d265×h360mm Chamber Only	
	Exterior	w280×d330×h510mm	w280×d330×h670mm; Including Shaking Base
C. SHAKING-Base; Connecting the Multiuse Shaking "SHO-1DI"			
- Motion & Speed - Controller & Display - Timer & Alarm - Motor & Max-Load - Safety Circuit - Material - Size & Weight		-	- Orbital, 10 ~ 300rpm, 8mm Stroke - Programmable Digital Feedback, LCD - 99hr 59min with ∞ Run, Error Status & Time End - Brushless DC Motor, Max-Load 10kg - Overload Protector of Motor - Powder Coated Steel Body - w260×d330×h140mm, 14kg
Net Weight (kg)		10kg	10kg+14kg Shaking Base ("SHO-1DI") = 24kg
Power Consumption		56W	56W+40W (Shaking)
Electric Reqts.		Free Voltage; 1Phase, AC90-240V, 50/60Hz	
Cat. No.	230V	DH.IncC020	DH.IncCS020
	120V	DH.IncC020.1	DH.IncCS020.1
Price, Set. ₩			

C. SHAKING-Base; Orbital Shaker

		Ea. Price, ₩
DH.SHO01DI	Shaker "SHO-1DI", 230V	
DH.SHO01DI.1	, 120V	

※*Note! Details of Optional Various Platforms : See The "Shaker" Section*

DAIHAN® 4~45℃ 20 Lit Mini-Low Temperature Incubator & Shaking Incubator, "ThermoStable™ IR-20 & IRS-20" NEW

2-Step Programmable PID Controlled 0.1℃, Compact Design for Saving Space/Money, Ideal for Culture & Storage of Microorganism/Clone
With Cooling/Heating system of Peltier Element/Auto-Tuning/Safety Device, 저온 미니-배양기&진탕 배양기, 20Lit, 4~45℃/0.1℃

A. 20Lit Mini-Low Temp Incubator "ThermoStable™ IR-20"

Figure; Assembly Shaking Incubator
You can easily connect the Incubator & Shaker

B. "IRS-20" Low Temp. Shaking Incubator Set

C. "SHO-1DI" Separable Orbital Shaker
; It can be Used Individually and Be Accepted

A. Standard Incubator "ThermoStable™ IR-20"

B. Assembly Shaking Incubator Package Set
"ThermoStable™ IRS-20" = "IR-20" Incubator + Orbital Shaker "SHO-1DI"

C. Multiuse Digital Orbital Motion Shaker "SHO-1DI" : Can be Used Individually.

It is same with existing Orbital Shaker "SHO-1D" except Platform and The Shaker "SHO-1DI" can be Accepted Optional Various Platforms; See "Shakers" Section

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance*** ■ ***2-Year Warranty***
- ***Applications Microorganism / Clone Culture & Storage, Reaction Experiment of Enzyme Immunity & Bacteriophage in Vitro Packaging, DNA Ligation, etc.***
- ***2-Step Temperature Control(PID Micro Processor) ; With 2-Step Setting Temp. Microorganism is Cultivated and Preserved by One Time(Setting time 99 hours)***
- ***ABS-Resin Chamber & Housing; Light-weight / Compact Design Good for Money & Space Saving and Personal Use.***
- ***Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-Information, and Traceable Data Base System.***

∗ Cooling / Heating System of PELTIER ELEMENT;
- Cooling and Heating by using Thermoelectric Semiconductor Element
- Minimizes Noise (<20dB) and Power Consumption

∗ Auto Tuning : Rapid Response and High Stability According to the Thermal Properties and the Rate of Thermal Response of the Object

∗ Safety Device : Over Temperature & Over Current Protection, Sensor Error Detection

∗ There are 4-Connection Device to Join a Shaker "SHO-1DI" in the Bottom outside of the Incubator "IR-20"

Specifications & Ordering Information

Spec. \ Model		A. Standard Incubator "ThermoStable™ IR-20"	B. Shaking Incubator Set "ThermoStable™ IRS-20"
Capacity (Lit)		20Lit Working Chamber	
Temp. Range Accuracy Uniformity		4℃ ~ 45℃, 0.1℃; Digital PID Control ±0.2℃(No Load) ±0.2℃(at 37℃)	
Cooling / Heating		Peltier Element Module	
2-Step Operation		Ideal for Cultivation and Preservation	
Air Flow-type		Gravity Flow Circulation	
1 Shelf and 3 Location Brackets		1 Perforated ABS Shelf(w210×d230×Thick 8mm) included Adjustable Shelf Location Height of 3-Stage	
Condensate Drain		Natural Evaporation	
Incubator Material		"ABS-Resin" Chamber & Housing, Except Shaking Base	
Incubator Dimension	Interior	w213×d265×h360mm Chamber Only	
	Exterior	w280×d330×h510mm	w280×d330×h670mm; Including Shaking Base
C. SHAKING-Base; Connecting the Multiuse Shaking "SHO-1DI"			
- Motion&Speed - Controller&Display - Timer&Alarm - Motor&Max-Load - Safety Circuit - Material - Size&Weight		-	- Orbital, 10 ~ 300rpm, 15mm Stroke - Programmable Digital Feedback, LCD - 99hr 59min with ∞ Run, Error Status & Time End - Brushless DC Motor, Max-Load 10kg - Overload Protector of Motor - Powder Coated Steel Body - w260×d330×h140mm, 14kg
Net Weight (kg)		7kg	7kg+14kg Shaking Base ("SSO-1DI") = 21kg
Packing Size & Weight		9kg	25kg
Power Consumption		56W	56W+40W (Shaking)
Electric Reqts.		Free Voltage; 1Phase, AC90-240V, 50 / 60Hz	
Cat. No.	230V	DH.IncR020	DH.IncRS020
	120V	DH.IncR020.1	DH.IncRS020.1
Price, Set. ₩			

C. SHAKING-Base; Orbital Shaker

Cat. No.		Ea. Price, ₩
DH.SHO01DI	Shaker "SHO-1DI", 230V	
DH.SHO01DI.1	, 120V	

※*Note! Details of Optional Various Platforms : See The "Shaker" Section*

Articles	Cat. No	Description

DAIHAN® Precise Shaking Incubator "ThermoStable™ IS-20", BenchTop-type, up to 60℃ & 1000㎖

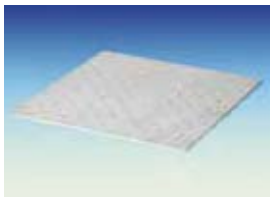
With Universal Platform, Fuzzy Control, RS232C Interface for PC, Orbital Motion, 30~250 rpm, 101 Lit

진탕 배양기/인큐베이터, 벤치 탑 타입, 고정밀 디지털 퍼지 제어, Universal Platform 포함

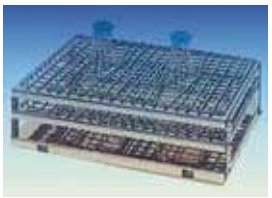
A. "IS-20" R/T ±5℃~ 60℃
B. "IS-20R" 10℃~ 60℃ Refrigerated

Connection of Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)

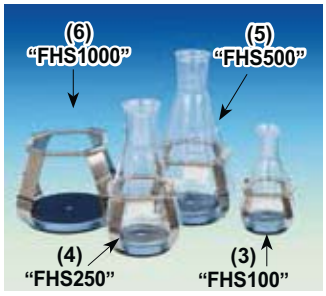
WiseRemote Control Software : Download from DAIHAN-Sci.com



(1) Universal Platform "SP600" (Included)



(2) Universal Spring Rack Platform "SR500" (Optional)



STS Flask Holder w/Spring Ring (Optional)

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Useful for Biological Cultures under various Temperature***
- ***Patented Jog-Shuttle Control System*** ■ ***Stabilized Orbital Motion***

* Precise Temperature Control by Digital Fuzzy Controller, up to 60℃, PT100 Sensor
* Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
* Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking
* Accommodate Flasks up to 1,000ml
* Minimum Noise and No Vibration
* RS232C Interface for Monitoring and Controlling with PC
* Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

Specifications & Ordering information

Spec. \ Model			A. "ThermoStable™ IS-20"	B. "ThermoStable™ IS-20R" with Refrigerator
Temp. Range			Room Temp. +5℃ ~ 60℃	10℃ ~ 60℃
Temp. Accuracy & Uniformity			Accuracy : ±0.2℃ at 37℃, Uniformity : ±0.5℃ at 37℃	
Capacity			101Lit	
Temp. Sensor			PT100 Sensor	
Heater			500 W	700 W
Compressor			None	1/4 HP
Compressor Control			None	Intelligent Control of Refrigerator for preventing Overload of Compressor
Refrigerant			None	CFC-Free(404A) Refrigeration System
Shaking Speed & Stroke			30 ~ 250 rpm, 25mm, Orbital Motion	
Timer & Alarm			99hr 59min (with Continuous run.), Error status & Timer-end	
Display			Digital LCD with Back-Light Function	
Controller			Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Room Lamp			60W Krypton Lamp	
Platform(Included) & Capacity for Optional Flask Holders			Universal Platform for Various Shapes & Sizes of Flasks Capacity : 32 ea Flask Holders for 50~100ml Flask 20 ea Flask Holders for 200~300ml Flask 16 ea Flask Holders for 500~1,000ml Flask	
Safety Circuit			Over Temp./ Current Protector, Leakage Breaker, Sensor Error Detector	
Material			Internal : Stainless-steel (#304), External : Powder Coated steel	
Dimension			Internal : 530×530×h350mm, External : 575×855×h850mm	
Packing Size (w×d×h) (mm) & Gross Weight			1,000×800×h1,100mm	
			147 kg	150 kg
Power Consumption			500 W	1.2 kW
Electrical Reqts.			1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	60Hz	230V	DH.WIS00220	DH.WIS01220
		120V	DH.WIS00120	DH.WIS01120
	50Hz	230V	DH.WIS00520	DH.WIS01520
		120V	DH.WIS00420	DH.WIS01420
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 40,000별도!

C. Validation (IQ, OQ) Service Shaking Incubator

		Ea. Price, ₩
DH.WIS32010	Validation Service(IQ, OQ), with **"IS-20"**, 60Hz, **"ISV2010"**	
DH.WIS32011	, with **"IS-20R"**, 60Hz, **"ISV2011"**	

Optional Spring Rack Platform and Stainless-steel Flask Holder(w/Spring Ring)

		Ea. Price, ₩
DH.WIS504600	(1) Spare Universal Platform, 478×478mm, **"SP600"**, for **"IS-20(R)"**, Included	
DH.WIS504500	(2) Spare Universal Spring Rack, 483×483×h135mm, **"SR500"**, for **"IS-20(R)"**	
DH.WIS600100	(3) STS Wire Spring Flask Holder, for 100ml Flask, **"FHS100"**, for **"SHO"**, **"SHR"** and **"IS"**	
DH.WIS600250	(4) , for 250ml Flask, **"FHS250"**, for **"SHO"**, **"SHR"** and **"IS"**	
DH.WIS600500	(5) , for 500ml Flask, **"FHS500"**, for **"SHO"**, **"SHR"** and **"IS"**	
DH.WIS601000	(6) , for 1000ml Flask, **"FHS1000"**, for **"SHO"**, **"SHR"** and **"IS"**	

DAIHAN® Precise Shaking Incubator "ThermoStable™ IS-30", Front Door-type, up to 60℃ & 1000㎖
With Universal Platform, Fuzzy Control, RS232C Interface for PC, Orbital Motion, 30~250 rpm, 127 Lit
진탕 배양기/인큐베이터, 전면도어 타입, 고정밀 디지털 퍼지제어, Universal Platform **포함**

A. "IS-30" R/T ±5℃~ 60℃
B. "IS-30R" 10℃~ 60℃ Refrigerated

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Useful for Biological Cultures under various Temperature***
- ***Patented Jog-Shuttle Control System*** ■ ***Stabilized Orbital Motion***

* Precise Temperature Control by Digital Fuzzy Controller, up to 60℃, PT100 Sensor
* Front Door and Sliding Platform Provides Easy Loading and Handling of Samples
* RS232C Interface for Monitoring and Controlling with PC.
* Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
* Accommodate Flasks up to 1,000ml * Minimum Noise and No Vibration.
* Universal Spring Rack for Various Shapes/Size of Flasks (Optional)
* Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
* Over Temperature & Over Current Protection and Leakage Breaking.

Specifications & Ordering information

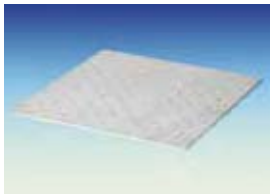
Spec. \ Model			A. "ThermoStable™ IS-30"	B. "ThermoStable™ IS-30R" with Refrigerator
Temp. Range			Room Temp. +5℃ ~ 60℃	10℃ ~ 60℃
Temp. Accuracy & Uniformity			Accuracy : ±0.2℃ at 37℃, Uniformity : ±0.5℃ at 37℃	
Capacity			127Lit	
Temp. Sensor			PT100 Sensor	
Heater			600 W	800 W
Compressor			None	1/4 HP
Compressor Control			None	Intelligent Control of Refrigerator for preventing Overload of Compressor
Refrigerant			None	CFC-Free(404A) Refrigeration System
Shaking Speed, Stroke & Motion			30 ~ 250 rpm, 25mm, Orbital Motion	
Timer & Alarm			99hr 59min (with Continuous run.), Error status & Timer-end	
Display			Digital LCD with Back-Light Function	
Controller			Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Platform(Included) & Capacity for Optional Flask Holders			Universal Platform for Various Shapes & Sizes of Flasks Capacity : 35 ea Flask Holders for 50~100ml Flask 16 ea Flask Holders for 200~300ml Flask 12 ea Flask Holders for 500~1,000ml Flask	
Safety Circuit			Over Temp./ Current Protector, Leakage Breaker	
Material			Internal : Stainless-steel (#304), External : Powder Coated steel	
Dimension			Internal : 570×465×h470mm, External : 916×730×h683mm	
Packing Size (w×d×h) (mm) & Gross Weight			1,050×900×h900mm	
			146 kg	156 kg
Power Consumption			600 W	1.3 kW
Electrical Reqts.			1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	60Hz	230V	**DH.WIS00230**	**DH.WIS01230**
		120V	**DH.WIS00130**	**DH.WIS01130**
	50Hz	230V	**DH.WIS00530**	**DH.WIS01530**
		120V	**DH.WIS00430**	**DH.WIS01430**
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

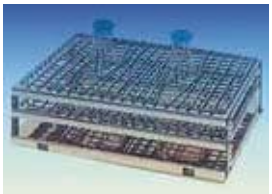
※ **운임 약 ₩ 40,000 별도!**

Connection of Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)

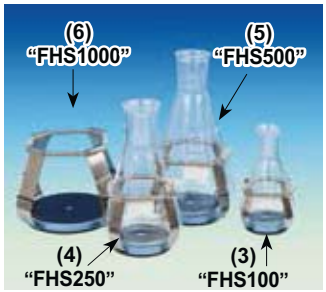
WiseRemote Control Software : Download from DAIHAN-Sci.com



(1) Universal Platform "SP630" (Included)



(2) Universal Spring Rack Platform "SR530" (Optional)



STS Flask Holder w/Spring Ring (Optional)

C. Validation (IQ, OQ) Service Shaking Incubator

		Ea. Price, ₩
DH.WIS33010	Validation Service(IQ, OQ), with **"IS-30"**, 60Hz, **"ISV3010"**	
DH.WIS33011	, with **"IS-30R"**, 60Hz, **"ISV3011"**	

Optional Spring Rack Platform and Stainless-steel Flask Holder(w/Spring Ring)

		Ea. Price, ₩
DH.WIS504630	(1) Universal Platform, 485×405mm, **"SP630"**, for **"IS-30(R)"**	
DH.WIS504530	(2) Universal Spring Rack, 498×408×h135mm, **"SR530"**, for **"IS-30(R)"**	
DH.WIS600100	(3) STS Wire Spring Flask Holder, for 100ml Flask, **"FHS100"**, for **"SHO"**, **"SHR"** and **"IS"**	
DH.WIS600250	(4) , for 250ml Flask, **"FHS250"**, for **"SHO"**, **"SHR"** and **"IS"**	
DH.WIS600500	(5) , for 500ml Flask, **"FHS500"**, for **"SHO"**, **"SHR"** and **"IS"**	
DH.WIS601000	(6) , for 1000ml Flask, **"FHS1000"**, for **"SHO"**, **"SHR"** and **"IS"**	

Articles	Cat. No	Description

DAIHAN® Precise Shaking Incubator "ThermoStable™ IS-10", Top Door-type, Orbital Motion, up to 60℃, ±0.2℃

With Universal Platform, Fuzzy Control, with or without illuminators & Recorder, 30~250 rpm, with Certi. & Traceability

진탕 배양기/인큐베이터, 탑 도어 타입, 고정밀 디지털 퍼지 제어, Universal Platform 포함

A. Room Temp. +5℃~60℃, With Universal Platform "ThermoStable™ IS-10"

Connection of Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)

WiseRemote Control Software : Download from DAIHAN-Sci.com

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Useful for Biological Cultures under various Temperature***
- ***Patented Jog-Shuttle Control System***

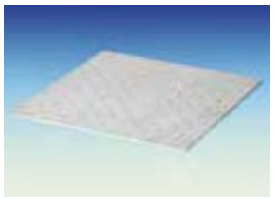
* Precise Temperature Control by Digital Fuzzy Controller, up to 60℃
* Digital LCD with Back-Light Function * Minimum Noise and No Vibration
* Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
* Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
* Intelligent Control of Refrigerator for preventing Overload of Compressor (IS-10R/IS10RL)
* RS232C Interface for Monitoring and Controlling with PC

Specifications & Ordering information

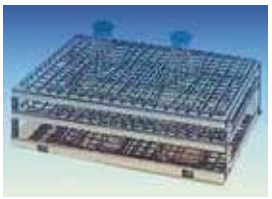
Spec. \ Model			A. IS-10	B. IS-10R with Refrigerator	C. IS-10RL Illumination
Temp. Range			R/T +5℃ ~ 60℃	10℃ ~ 60℃	
Temp. Accuracy & Uniformity			Accuracy : ±0.2℃ at 37℃, Uniformity : ±0.5℃ at 37℃		
Capacity			229Lit		
Temp. Sensor			PT100 Sensor		
Heater			800 W	1 kW	1.2 kW
Compressor			None	1/3HP	
Refrigerant			CFC-Free (404A) Refrigeration System		
Shaking Speed & Stroke			30 ~ 250 rpm, 25mm Orbital Motion		
Timer & Alarm			99hr 59min (with Continuous run.), Error status & Timer-end		
Controller			Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Illumination System			None		FPL 55W×4ea
Room Lamp			Krypton Lamp, 60W		None
Platform(Included)			Universal Platform for Various Shapes & Sizes of Flasks		
Safety Circuit			Over Temp./ Current Protector, Leakage Breaker, Sensor Error Detector		
Material			Internal : Stainless-steel (#304), External : Powder Coated steel		
Dimension			Internal : 750×720×h400mm, External : 1,065×900×h980mm		
Packing Size (w×d×h) (mm) & Gross Weight			1,220×1,060×h1,200mm		
			231 kg	238 kg	238 kg
Power Consumption			800 W	1.8 kW	2.1 kW
Electrical Reqts.			1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No.	**60Hz**	**230V**	**DH.WIS00210**	**DH.WIS04210**	**DH.WIS05210**
		120V	**DH.WIS00110**	**DH.WIS04110**	**DH.WIS05110**
	50Hz	**230V**	**DH.WIS00510**	**DH.WIS04510**	**DH.WIS05510**
		120V	**DH.WIS00410**	**DH.WIS04410**	**DH.WIS05410**
Price, Each. ₩					

*** Other Specifications are available upon Customer's Request.**

※ 운임 약 ₩ 40,000별도!



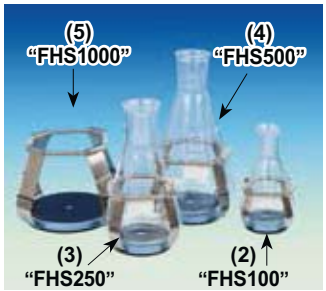
(1) Universal Platform "SP610" (Included)



(6) Universal Spring Rack Platform "SR510" (Optional)

D. Validation (IQ, OQ) Service Shaking Incubator

		Ea. Price, ₩
DH.WIS31010	Validation Service(IQ, OQ), with **"ThermoStable IS-10"**, 60Hz	
DH.WIS31011	, with **"ThermoStable IS-10R"**, 60Hz	
DH.WIS31012	, with **"ThermoStable IS-10RL"**, 60Hz	



STS Flask Holder w/Spring Ring (Optional)

Optional Spring Rack Platform/Recorder/Stainless-steel Flask Holder(with Spring Ring)

		Ea. Price, ₩
DH.WIS504610	(1) **Spare** Universal Platform, w688×h648mm, **"SP610"**, Flask Holder Capacity ; 68ea for 50~100ml Flask, 36ea for 200~300ml Flask, 21ea for 500~1000ml Flask	
DH.WIS600100	(2) STS Wire Spring Flask Holder, for 100㎖ Flask , **"FHS100"**	
DH.WIS600250	(3) , for 250㎖ Flask , **"FHS250"**	
DH.WIS600500	(4) , for 500㎖ Flask , **"FHS500"**	
DH.WIS601000	(5) , for 1000㎖ Flask, **"FHS1000"**	
DH.WIS504510	(6) Universal Spring Rack, w693×d653×h135mm, **"SR510"**	
DH.WTH05100	(7) Temperature Recorder, with 6ea Ribbon Cassette & Chart Paper LED, 6ch/10sec, 144×144×h233mm, **"WTH5105"**	
DH.WTH05108	Ribbon Cassette, 6 Colors, **"WTH5108"**	
DH.WTH05105	Chart Paper, w100mm×L10m, 33 Days, **"WTH5105"**	

DAIHAN® Multi-Stack Refrigerated Shaking Incubator "WIS-ML", Orbital Motion, with 2 & 4 Universal Platform

With Digital Fuzzy Control, 2 or 4 Independent Shaking Speed Control, 10~60℃, 30~250 rpm, 2 & 4 Stack

대형 멀티 진탕 배양기, 고정밀 디지털 퍼지 제어, 2 & 4 Universal Platform 포함

B. Multi-Stack Refrigerated Shaking Incubator with 4 Universal Platform "WIS-ML04"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Excellent for Multi-use and wide range of Sample Testing under various Temperature***
- ***Patented Jog-Shuttle Control System***

∗ Digital Fuzzy Control System Implementing Superior Temperature Accuracy
∗ Intelligent Control of Refrigerator for Preventing Overload of Compressor
∗ Advanced Shaking Mechanism provides Quiet Shaking and Precise Speed Control
∗ Space Saving Design for Large Quantity Samples with 2 or 4 Independent Shaking Speed Controller
∗ Automatic Stop of Shaking, Heating and Refrigeration when the Door is Opened
∗ RS232C Interface for Monitoring and Controlling with PC ∗ Including Universal Platform
∗ Over Temperature & Over Current Protection and Sensor Error Detection
∗ Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

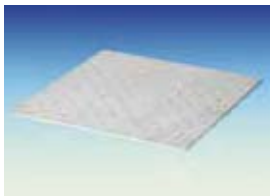
Specifications & Ordering information

※ 운임 약 ₩ 95,000별도!

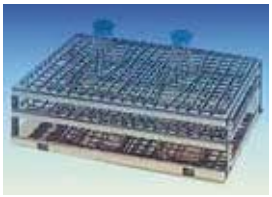
Spec. \ Model		A. "WIS-ML02" 2 Shaking Platform	B. "WIS-ML04" 4 Shaking Platform
Shaking Stacks		2 Stack	4 Stack
Temp. Range & Accuracy		10℃~ 60℃, ±0.2℃ at 37℃	
Temp. Uniformity & Sensor		±1.0℃ at 37℃, PT100 Sensor	
Heater		1.5 kW	1.8 kW
Compressor		1/2HP	3/4HP
Compressor Control		Intelligent Control of Refrigerator for Preventing Overload of Compressor	
Refrigerant		CFC-Free(404A) Refrigeration System	
Shaking Speed & Stroke		30 ~ 250 rpm, 25mm Orbital Motion	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Door		Magnetic Packing Door with Pair Glass	
Plate Size		w700×d600mm	
Platform(Included) & Capacity for Optional Flask Holders		Universal Platform for Various Shapes & Sizes of Flasks Capacity : 68 ea Flask Holder, for 50~100ml Flask 36 ea Flask Holder, for 200~300ml Flask 21 ea Flask Holder, for 500~1,000ml Flask	
Safety Circuit		Over Temp./ Current Protector, Sensor Error Detector	
Material		Internal : Stainless-steel (#304), External : Powder Coated steel	
Dimension (w×d×h)	Internal (mm)	700×700×1,100	700×700×1,790
	External (mm)	1,290×850×1,445	1,290×850×2,125
Packing Size (w×d×h) (mm) & Gross Weight		1,500×1,200×1,750	1,500×1,200×2,350
		397 kg	555 kg
Power Consumption		2.4 kW	3.2 kW
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase
Cat. No.	230V	**DH.WIS05002**	**DH.WIS05004**
	120V	**DH.WIS05102**	**DH.WIS05104**
	3Phase	-	**DH.WIS03004**
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

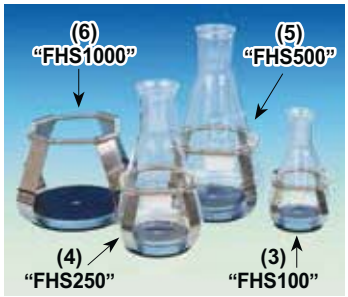
※ 운임 약 ₩ 95,000별도!



(1) Universal Platform "SP620" (Included)



(2) Universal Spring Rack Platform "SR520" (Optional)



STS Flask Holder w/Spring Ring (Optional)

C. Validation (IQ, OQ) Service Shaking Incubator

		Ea. Price, ₩
DH.WIS35002	Validation Service(IQ, OQ), with **"WIS-ML02"**	
DH.WIS35004	, with **"WIS-ML04"**	

Optional Spring Rack Platform and Stainless-steel Flask Holder(with Spring Ring)

		Ea. Price, ₩
DH.WIS504620	(1) Universal Platform, w645×h645mm, **"SP620"**, for **"WIS-ML02/04"**, Included	
DH.WIS504520	(2) Universal Spring Rack, w653×d653×h135mm, **"SR520"**, for **"WIS-ML02/04"**	
DH.WIS600100	(3) STS Wire Spring Flask Holder, for 100㎖ Flask , **"FHS100"**	
DH.WIS600250	(4) , for 250㎖ Flask , **"FHS250"**	
DH.WIS600500	(5) , for 500㎖ Flask , **"FHS500"**	
DH.WIS601000	(6) , for 1000㎖ Flask, **"FHS1000"**	

Articles	Cat. No	Description

(1) Fluorescent Light Magnifier "BLM-F"

Wisd Multi-use Fluorescent Light Magnifier "BLM-F", ×5 · ×8 Magnification

Base Stand-type, Φ127mm B270 High Clear White Glass Lens, Flexible Arm, 12W, **형광 조명 확대경**

- ***Made in Korea***
- ***Ideal for Laboratory, Hospital, Circuit Board Check-Up, etc.***
- ***International Standard Φ127mm B270 White Glass Lens***
- ***Light Source : High Brightness Daylight Blue Fluorescent***
- ***20% Energy Saving Ballast Stabilizer Control System***
- ***Adjustable Height and Lens Angle Direction***
- ***2-Stage Spring Flexible Arm***

∗ Light Illumination : 2,800lx
∗ Adjustable Height : 300 ~ 500mm
∗ Base Size : 220×33 m
∗ Electric Power : AC 220V, 12W

Ordering Information

		Ea.	Price,₩
DH.Mag3105	Magnifier, Fluorescent Light, ×5, **"BLM-F105"**		
DH.Mag3108	, ×8, **"BLM-F108"**		

(2) LED Light Magnifier "BLM-L"

Wisd Multi-use LED Light Magnifier "BLM-L", ×5 · ×8 Magnification

Base Stand-type, Φ127mm B270 High Clear White Glass Lens, Flexible Arm, 12W, LED **조명 확대경**

- ***Made in Korea***
- ***Ideal for Laboratory, Hospital, Circuit Board Check-Up, etc.***
- ***International Standard Φ127mm B270 White Glass Lens***
- ***Light Source : High Brightness White LED Bulbs (36ea)***
- ***Adjustable Height and Lens Angle Direction***
- ***2-Stage Spring Flexible Arm***
- ***Scratch and Nick-Resistant PP Lens Cover***

∗ Ultra Bright LED Light : 5,000lx
∗ Adjustable Height 300 ~ 350mm
∗ Base Size : 220×330mm
∗ Electric Power : AC 220V, 12W

Ordering Information

		Ea.	Price,₩
DH.Mag3205	Magnifier, Fluorescent Light, ×5, **"BLM-L105"**		
DH.Mag3208	, ×8, **"BLM-L108"**		

DAIHAN® Pocket Anemometer of Flow/Temp/RH%/Dew-point/Compass, Foldable, IP54 Water Resistance & Shock Proof
1.1~20m/s, −15+50℃, 0~100% RH, Dew-point & Compass 360°, Tripod-stand Mountable, 소형 다기능 아네모메타

Pocket Anemometer for 3×Measuring

* Small Pocket Knife Shape & Compact Design. * IP54 Water Resistant & Shock Proof. * LCD Size : 16×28mm
* Temp. Units ℃/°F Selectable. * Auto Sleep Mode Disable Included. * Tripod Mountable Receptacle.
* Measures 7 Parameters : Air Velocity, Compass, Temperature, Humidity, Windchill, Wet Bulb & Dew Point
* 6 Wind Units Selectable : KNT(Knot), BF(Beaufort), FPM(Feet Per Minute), MPH(Mile Per Hour), MPS(Meter Per Second), KPH(Kilometer Per Hour).

Specifications & Ordering information

Spec. \ Model	DH.Ane5	
3×Measuring Range	(1) Wind Speed : 0.5 ~ 44.7m/h, 60 ~ 3937ft/m, 0.4 ~ 38.8knt, 1.1 ~ 20.0m/s, 0.7 ~ 72.0km/h, 1 ~ 8bf, (2) Temp. : −15℃ ~ +50℃, (3) RH% : 0%RH ~ 100%RH	
Accuracy	(1) Wind Speed : ±(3% of Reading +0.2m/s), (2) Temp. : ±1℃, (3) RH% : ±3%RH(at 25℃, 10 ~ 90%RH, other ±5%RH)	
Resolution	(1) Temp. : 0.1℃/°F, (2) RH% : 0.1%RH	
Display	(1) Windchill : −20.0℃ ~ 50.0℃, (2) Dew Point : −20.0℃ ~ 50.0℃, (3) Wet Bulb : −5.0℃ ~ 50.0℃, (4) Compass : 0~360 Degree	
Battery	1×CR2032 Battery	
Dimension & Weight	140×45×h25 mm (90° Folded), 235×45×h25 mm (180° Full Opened) / 90g	
Standard Package	Meter / Battery / Manual / Strap / Paper Box	
Cat. No. & Price ₩	**DH.Ane3005**	**Set**
Spare ; DH.Ane3005.1	Mini Fan for Anemometer	**Ea**

DAIHAN® Combo-Anemometer of Flow / Temp / RH% / Dew-point, PC-interface, Datalogging
0.5m/s, −20+60℃, 0.1~99.9% RH, −20+59.9℃ D-point, & Wet Bulb, with 18mm Vane Probe & Cable, 정밀 아네모메타

Combo - Anemometer Hard Carrying Case

* Measures Air Velocity, Volume, Temperature, Humidity, Dew Point & Wet Bulb Temperature.
* Thermistor Temp. Sensor and Capacitive Humidity Sensor for Quick and Accurate Measurement.
* 18mm Mini Vane Probe with Built-in Temp. & Humidity Sensor. * 99 Single Point Memories.
* Winds Peed Metric and Imperial Units Selectable. * Up to 12000 Points Auto Datalogging Points.
* PC Interface for Data download * Date and Time Stamp (12-Hour or 24-Hour)

Specifications & Ordering information

Spec. \ Model	DH.Ane3	
3×Measuring Range	(1) Wind Speed : 0.5 ~ 20M/S, (2) Temp. : −20℃ ~ 60℃, (3) RH% : 0.1 ~ 99.9%RH	
Accuracy	(1) Wind Speed : ±(3% of reading + 0.2M/S), (2) Temp. : ±0.6℃, (3) RH% : ±3%RH(at 25℃, 10 ~ 90%RH, other ±5%RH)	
Resolution	(1) Temp. : 0.1℃/°F, (2) RH% : 0.1%RH	
Display	(1) Wet Bulb & Dew Point Temp. : −20℃ ~ +59.9℃, (2) Air Volume : 0 to 99999m³/min	
Battery	4×AAA Battery or 9V DC Adaptor	
Dimension & Weight(g)	180×58×h24.5 mm (LCD Size : 54×37 mm) / 200g	
Standard Package	Meter / Probe / Battery /Manual / Hard Carrying Case / Software Kit	
Cat. No. & Price ₩	**DH.Ane3003**	**Set**
Spare ; DH.Ane3003.1	Expanded Vane Probe, 273×18.5mm (1055mm Extended), w/Rubber Holder	**Ea**

DAIHAN® Digital Anemometer Set, for Air Velocity & Temperature, Max/Min/Average
With 10 Memories Data Storage / Recalling / Clearing, m/s· m/hr · ft/min · knots, and ℃/°F

Digital Anemometer Set, for Air Velocity / Temp.

* Ideal for Professional in Aviation, Laboratory and Ventilation Systems. * CE Approval.
* Instant Display of the Air Velocity and Temperature. * Maximum, Minimum and Average Calculation.
* Selectable Air Velocity Unit m/s, km/hr, mph, ft/min or Knots. * Switchable Temperature Unit ℃/°F.
* 10 Memories Data Storage/Recalling/Clearing. * 1/4in. 20 UNC Threading for Tripod Mounting.

Specifications & Ordering information

Spec. \ Model	A1.A9201	
2×Measuring Range	(1) Temp.: −50℃ to +70℃ or −58°F ~ +158°F, (2) Air Velocity : 0.5 to 45.0m/s • 1.8 to 162.0km/hr • 1.1 to 100.0mph, 98 to 880ft/min • 1.0 to 88.0knots	
Accuracy	(1) Temp.: ±0.5℃(for 0℃~+50℃) or ±0.9°F(for +32°F~122°F), otherwise ±1℃ or 1.8°F, (2) Air Velocity : ±2%	
Resolution	(1) Temp.: 0.1 for whole Range, (2) Air Velocity : 0.1	
Color / Ambient Temp.	Grey / 0℃ to +50℃ or +32°F~+122°F	
Battery / Probe Type	3×1.5V AAA Battery / NTC-Probe : 76×67×32mm (1Meter Cable)	
Dimension / Weight(g)	85×175×h39mm (LCD Size : 54×35 mm) / 200g	
Cat. No. & Price ₩	**A1.A9201**	**Ea**

DAIHAN® Precise 10cm Vane Anemometer of Flow / Temp / RH% / Dew-point / Wet Bulb / Air Volume

2 Dedicated Flow Funnel Acceptable, 0.2~30m/s, −20+60℃, 0.1~99.9% RH, D-point & 99,999m³/min, **정밀 아네모메타**

Precise 10cm Vane Anemometer

Air Flow Cone Set(Option)

* Measures Air Velocity, Volume, Temperature, Humidity, Dew Point & Wet Bulb Temperature.
* Built-in Thermistor Temp. & Capacitive Humidity Sensor for Quick and Accurate Measurement.
* Unlimited Points & Time Weighted Average Auto Calculation.
* Hold Function Freezes Current Readings
* Inlet and Outlet Measurement is Doable
* Auto Power off 20mins Inactivity.
* Blue Backlight for Dark Area Operation.
* Display Max / Min Value.
* Low Battery Indicator

Specifications & Ordering information

Spec. \ Model	DH.Ane7	
3×Measuring Range	(1) Wind Speed : 0.2 ~ 30M/S, (2) Temp. : −20℃ ~ 60℃, (3) RH% : 0.1%RH ~ 99.9%RH	
Accuracy	(1) Wind Speed : ±(1.5% of Reading +0.3m/s) for under 20m/s, ±(3% of Reading +0.3m/s) for above 20m/s, (2) Temp. : ±0.6℃, (3) RH% : / ±3%RH(at 25℃, 10 ~ 90%RH, other ±5%RH)	
Resolution	(1) Temp : 0.1℃/℉, (2) RH% : 0.1%RH	
Display	(1) Wet Bulb Temp. : −20℃ ~ +59.9℃, (2) Dew Point Temp. : −5℃ ~ +59.9℃, (3) Air Volume : 0 to 99999m³/minute	
Temp. Respond Time	60 second (Typical)	
Air RH% Response Time	60 second (Typical)	
Battery	4×AAA Battery	
Dimension & Weight	269×106×h51 mm (LCD Size : 32.5×54 mm) / 200g	
Standard Package	Meter / Manual / Battery / Hard Carrying Case	
Cat. No. & Price ₩	**DH.Ane3007**	**Set**
Option ; DH.Ane3007.1	Air Flow Cone, Round(Φ210mm) + Square(346×346mm) Set	**Set**

DAIHAN® Digital/Compact Environmental Multi-Meter, with EL Backlight, Rubber Coated

For Air Pressure "mb" / Altitude"m" / Temp "℃" / Direction " ° " / Weather Forecasting / Calendar / Alarm Timer

With Jumbo LCD Display, **휴대용 디지털 멀티 메타, 기압 / 고도 / 방위 / 일기예보 / 시계 / 달력표시**

Digital/Compact Environmental Multi-Meter

* CE Approval.
* Ideal for All Kind of Environmental Measurements, Laboratory
* Simultaneous Display of Air Pressure, Altitude, Temperature and Compass.
* Bargraph Display of Air Pressure and Altitude.
* Weather Forecasting in Graphic Display.
* Calendar and Clock/Timer(with Alarm) Setting.
* Easy Operation Via Six Function Keys.
* EL Backlight for Use in Dim Light Environment.
* Convenient Design with Lanyard for Carrying.

Specifications & Ordering information

Spec. \ Model	A1.A9202	
4×Measuring Range	(1) Air Pressure: 300~1100mb(hPa) or 8.85inHg~32.45inHg, (2) Altitude : −700 ~+9000m or −2296ft~+29520ft, (3) Temp.: −10℃ ~+60℃ or −14℉~+140℉, (4) Direction : 0~359°	
Sensing Time	(1) Air Pressure: 15min, (2) Altitude : 2 sec, (3) Temp.: 1min, (4) Direction : 1sec. for 1min	
Resolution	(1) Air Pressure: 1mb/hPa or 0.01inHg, (2) Altitude 0.1m for −500.0m to 999.9m, Otherwise 1m, (3) Temp.: 0.1℃ or 0.1℉, (4) Direction : 1℃	
Color / Ambient Temp.	Grey / 0℃ to +50℃ or +32℉~+122℉	
Weight (g) / Timer / Color	110g / 23hr 59min 59sec / Yellow·Grey	
Battery / Package	2×3 V "CR2032" Size or Equivalent / Standard Color Box	
Sensor Type	NTC-Probe, Pressure Sensor and Magnetic Sensor	
Dimension / Weight(g)	85×62×24mm(LCD Size : 40×39 mm)	
Cat. No. & Price ₩	**A1.A9202**	**Ea**

DAIHAN® Methane & Propane Gas Leak Detector, with Alarm, 40~640 ppm
With 5-Level Leakage Indicator & Auto-Calibration Function, 메탄 & 프로판가스 누출 검지기

* Low Cost Handheld type Detector Checking Methane and Propane Gas Leakage.
* Bright 5-Level Leakage LED Indicator.
* Status Ready and Battery Low LED Indicator.
* Quality & Reliable Semi-Conductor Sensor.
* Acoustic Intermittent Beep.
* Built in Auto-Calibration Function while Meter Powers on.
* Auto Power off Timeout about 10 mins.
* Long & Flexible Stainless Goose Neck Detect Probe.
* Built in Earphone Jack for Mute Mode Use.

Specifications & Ordering information

Spec. \ Model	DH.Gas3
Methane / Propane Range	40 ~ 640 ppm
Sensitivity	40 ppm (Methane & Propane)
Response Time & Warm Up	within 10 seconds / within 60 seconds
Battery	4×AA Battery or 9V Adaptor
Flexible Probe Length	18˝ (465mm)
Dimension & Weight(g)	175×47×h28 mm / 120g
Standard Package	Meter / Manual / Battery / Carrying Case
Cat. No. & Price ₩	**DH.Gas3003** **Set**

Pocket type CO Detector

DAIHAN® Pocket type CO Detector, with Dual LCD Display / Alarm, 0~999 ppm
With Wrist Strap / Soft Carrying Pouch, 핸디 일산화탄소(CO) 디텍터

* Easy to Manually Calibrate at 0 or 500ppm Carbon Monoxide Standard Gas.
* Low Battery Indicator.
* Dual LCD Display with Current Carbon Monoxide and Maximum CO Readings.
* Long Life and Reliable Electrochemical Carbon Monoxide Sensor.
* Backlight Function Works in Dark Area.
* Warning Carbon Monoxide Audible Alert. Alarm Adjustable, Preset at 25ppm.

Specifications & Ordering information

Spec. \ Model	DH.Gas5
CO Range & Resolution	0 ~ 999 ppm / 1 ppm
Accuracy (at 20±5℃, 50±20%RH)	±20% at 0 ~ 100ppm ; ±15% at 100 ~ 500ppm
Response Time / Battery	within 60 seconds / 3×AAA Battery
Dimension & Weight(g)	175× 47×h28 mm (LCD Size : 11×26 mm) / 120g
Standard Package	Meter / Manual / Battery / Plain Box / Wrist Strap / Soft Carrying Pouch
Cat. No. & Price ₩	**DH.Gas3005** **Set**

DAIHAN® Combo Air Quality Meter of CO / CO_2 / Temp / RH% / Dew-point / Wet Bulb, PC Data Analysis
0~1000ppm-CO, 0~9999ppm-CO_2, −20+60℃, 0.1~99.9% RH, −20+59.9℃-DP, −5+59.9℃-WB, Alarm 콤보 에어테스터

* Manual Calibration is available for CO_2 / CO / RH%
* USB Output to PC for Data Analysis
* Designed with electrochemical CO Sensor and NDIR(Non-dispersive Infrared) Waveguide Technology CO_2 Sensor
* Warning Carbon Monoxide Level Programmable
* Audible Alarm (~80dB) Threshold Setting
* Max, Min, Average Functions Included
* 99 Points Memory Review

Combo Air Quality Meter

Specifications & Ordering information

Spec. \ Model	DH.Gas7
6×Measuring Range	(1) CO_2 : 0 ~ 9999 ppm(5001 ~ 9999 ppm out of scale range), (2) CO : 0 ~ 1000 ppm, (3) Temp. : −20 ~ 60℃(−5 ~ 140˚F), (4) RH : 0.1 ~ 99.9%RH, (5) DP : −20 ~ 59.9℃, (6) WB : −5 ~ 59.9℃
Accuracy	(1) CO_2 : ±30 ppm ±5% of reading (0 ~ 5000 ppm), Other ranges are not specified, (2) CO : ±10 ppm for less than 100 ppm / ±10% of reading for 101 ~ 500 ppm, ±20% of reading for 501 ppm and above, (3) Temp. : ±0.6℃/±0.9˚F, (4) RH : ±3%RH(at 25℃, 10~90%RH), ±5%RH(at 25℃, other range)
Resolution	1 ppm, 0.1℃/˚F, 0.1%RH
Response Time	(1) CO_2 : < 30 seconds (90% step change), (2) CO : < 60 seconds (90% step change), (3) Tair : < 2 mins (90% step change), (4) RH : < 10 mins (90% step change)
Power Supply	4×AA Battery or 9V adaptor (>24hours, Alkaline Battery)
Dimension & Weight(g)	205×70×h56 mm(LCD Size : 26×44 mm) / 200g
Standard Package	Meter / Manual / Battery / USB Cable & CD / Carrying case
Cat. No. & Price ₩	**DH.Gas3007** **Set**
Option ; DH.Gas3007.1	① Cal. Salt Bottle, for Calibration, 33%, 56ml **Ea**
DH.Gas3007.2	② , 75%, 56ml **Ea**

DAIHAN® "Green Life" Indoor Air Monitor of CO_2 / Temp / RH% and Time Clock, Desktop-model

With CO_2 Alarm, 0~9999ppm with Auto-Background Calibration, −10+60℃, 0.1~99.9%RH, "그린라이프" 룸에어모니터

Indoor Air Monitor

* 15 Degree Tilt Angle for Easy to See and Read
* Warning Carbon Dioxide Level from 1000~5000 ppm
* Display CO_2 Value (with Good, Normal, Poor Air), Year-Month-Date, Hour-Minute, Air Temp. & Relative Humidity
* NDIR (Non-dispersive Infrared) Waveguide Technology
* CO_2 Auto-Background Calibration, ABC

Spec. \ Model	DH.Gas9
3×Measuring Range	(1) CO_2 : 0 ~ 9999 ppm (2001 ~ 9999 ppm out of scale range), (2) Temp. : −10 ~ 60℃(14 ~ 140°F), (3) RH% : 0.1 ~ 99.9%RH
Resolution	1 ppm, 0.1℃/°F, 0.1%RH
Accuracy	(1) CO_2 : ±50ppm ±5% of reading (0 ~ 2000 ppm), (2) Temp. : ±0.6℃/±0.9°F, (3) RH% : ±5%RH(at 25℃, 20~90%RH), ±7%RH(at 25℃, other range)
Response time	(1) CO_2 : < 2 mins (90% step change), (2) Tair : < 2 mins (90% step change), (3) RH : < 10 mins (90% step change)
Power Supply	5V DC Adaptor(±10%), >= 500mA
Dimension & Weight(g)	120×80mm(LCD Size : 60×82 mm) / 200g
Standard Package	Meter / Manual / Adaptor / Plain Box
Cat. No. & Price ₩	**DH.Gas3009** **Set**

DAIHAN® Air Quality Meter & Monitor of CO_2 / Temp / RH% / Dew-point / Wet-Bulb, PC Data Analysis

0~9999ppm-CO_2, −10+60℃, 0.1~99.9% RH, −20+59.9℃-DP, −5+59.9℃-WB, NDIR-Sensor, 다기능 에어 미터/모니터

(1) Air Quality Meter Carrying Box

(1) Air Quality Meter

* Triple Display 3 Parameters Simultaneously : CO_2, Temperature and Relative Humidity and Display Air / Dew Point / Wet Bulb Temp. by Selection
* Warning Carbon Dioxide Level
* Big LCD display with High Resolution
* Design with NDIR(Non-Dispersive Infrared) Waveguide Technology CO_2 Sensor
* 80dB-Alarm

Spec. \ Model	DH.Gas13
5×Measuring Range	(1) CO_2 : 0 ~ 9999 ppm, (2) Temp. : −10 ~ 60℃(14 ~ 140°F), (3) RH% : 0.1 ~ 99.9%RH, (4) DP : −20.0 ~ 59.9℃, (5) WB : −5.0 ~ 59.9℃
Accuracy	(1) CO_2 : ±50 ppm ±5% of reading (0 ~ 2000 ppm), (2) Temp. : ±0.6℃ / ±0.9°F, (3) RH : ±3% RH(at 25℃, 10 ~ 90%RH)
Resolution	1 ppm, 0.1℃/°F, 0.1%RH
Response Time	(1) CO_2 : <30 sec, (2) Tair : <2 min, (3) RH : <10 min. (90% step change)
Warm-up Time / Battery	30 sec. / 4×AA Battery
Dimension / Weight(g)	205×70×h56mm(LCD Size : 26×44mm) / 200g
Standard Package	Meter / Manual / Battery / Hard Carrying Case
Cat. No. & Price ₩	**DH.Gas3013** **Set**

(2) Wallmount Air Quality Monitor

(2) Wallmount Air Quality Monitor

* Digital Wall mountable / Desktop type
* Alarm Output Drive Relay to Control System
* Warning Carbon Dioxide Level
* with 80dB Alarm
* Super Large LCD display CO_2 Value
* NDIR(Non-Dispersive Infrared) Waveguide Technology with ABC(Automatic Background Calibration)
* PC Output to Computer for on Line Analysis
* Long Time Drift Compensation

Spec. \ Model	DH.Gas15
5×Measuring Range	(1) CO_2 : 0 ~ 9999 ppm (2001~9999 ppm out of Scale Range), (2) Temp. : −10 ~ 60℃(14 ~ 140°F), (3) RH : 0.1 ~ 99.9%RH, (4) DP : −20.0 ~ 59.9℃, (5) WB : −5.0 ~ 59.9℃
Accuracy	(1) CO_2 : ±50 ppm ±5% of reading(0 ~ 2000 ppm),(2) Temp. : ±0.6℃ / ±0.9°F, (3) RH : ±3% RH(at 25℃, 10 ~ 90%RH) or ±5% RH(at 25℃, others)
Resolution	1 ppm, 0.1℃/°F, 0.1%RH
Response Time	(1) CO_2 : <30 sec, (2) Tair : <2 min, (3) RH : <10 min. (90% step change)
Warm-up Time	30 sec.
Power Supply	12 VDC Adaptor
Dimension / Weight(g)	130×85×h60mm (LCD Size : 50×65 mm) / 200g
Standard Package	Meter / Manual / 12V Plug Adaptor / Plain Box
Cat. No. & Price ₩	**DH.Gas3015** **Set**

Optional Accessory

		Ea.	Price,₩
DH.Gas3013.1	① USB Cable & Software		
DH.Gas3013.2	② RS232 Cable & Software		
DH.Gas3007.1	③ Cal. Salt Bottle, for Calibration, 33%, 56ml		
DH.Gas3007.2	④ , 75%, 56ml		

DAIHAN® Digital Pressure / Vacuum Manometer, 10-Different Units ; psi, mbar, etc, with 8mm Metal Lug
+/−(±)30psi / 1551mmHg / 2068 mbar, PC Data Analysisable, Max-Min / Hold / Record, 디지털 마노미터

Digital Pressure / Vacuum Manometer

Hard Carrying Case

■ ***Portable Digital Gauge ; 10 Differential Units Pressure / Vacuum Meter, with 8mm Metal Connection***
■ ***PC Interface via Cable and Software to Download Data***
∗ Over-range Indication with Error Messages
∗ 10 units or 5 units for Selection (Metric, Imperial)
∗ Connection ; 8mm Metal Lug
∗ Backlight Function works in Dark Area
∗ Low Battery Indicator
∗ Real Time Shows in Recording Mode

Spec. \ Model		DH.Man3003
Range & Resolution	psi	±30.00 & 0.02
	kPa and mmHg	kPa : ±206.8 & 0.2, and mmHg : ±1551 & 1
	Kg/cm² and mbar	Kg/cm² : ±2.109 & 0.002, and mbar : ±2068 & 2
	bar and inH₂O	Bar : ±2.068 & 0.002, and inH₂O : ±830.4 & 0.5
	cmH₂O and inHg	cmH₂O : ±2101 & 2, and inHg : ±61.08 & 0.04
	ftH₂O and oz/inch²	ftH₂O : ±69.2 & 0.04, and oz/inch² : ±480.0 & 0.3
Accuracy		±0.3% of Full Scale at 25℃
Response Time		0.5 sec
Compensated Temp. Range		0~50℃
Battery		9V Battery or Adaptor
Dimension / Weight(g)		182×72×30 mm (LCD Size : 29×51mm) / 150g
Standard Package		Meter, Battery, Manual, 2×Connection Hose(50cm), Hard Carry Case
Cat. No. & Price ₩		**DH.Man3003** **Set**

Option ;	DH.Gas3013.1	① USB Cable & Software	Ea
	DH.Gas3013.2	② RS232 Cable & Software	Ea
	DH.Man3003.1	③ Tubing for 30psi Pressure / Vacuum and 8mm Lug, 50cm, Black	Ea

※ **Units Conversion** : 1psi×6.8947=kpa, 1psi×68.947=mbar(hpa), 1psi×0.068966=bar, 1psi×51.71433=torr
1psi×70.038=cmH₂O, 1psi×51.715=mmHg, 1psi×16=oz/inch², 1psi×6890=pascal(pa)
※ **Note!** : Exceeding Maximum Pressure will cause Permanent Sensor Damage !

Salinity Pen-type Meter

DAIHAN® Pocket Dual TEMP & SALINITY Pen-type Meter, Data Hold
With Large Display LCD for Salinity and Temp, 00.00~70.0ppt / 0~50.0℃, 휴대용 염분계

∗ One Touch Auto-calibration & Calibration Values are Adjustable
∗ Hold Function to Freeze Current Reading
∗ Large Display LCD for Simultaneous Output of Salinity and Temperature (w18×h30 mm)
∗ Water Proof (Ip65)
∗ Quick Response & Auto Power off (20min / Disable)
∗ Built-in NaCl conductivity to TDS Conversion Factor
∗ Auto Temperature Compensation
∗ Temperature unit ℃/°F Selectable

Spec. \ Model	DH.Sal3
2×Measuring Range	(1) Salinity : 0.00 ~ 10.0ppt(NaCl), 10.1 ~ 70.0ppt(NaCl), (2) Temp.: 0 ~ 50.0℃
2×Accuracy	(1) Salinity : ±1%F.S ±1digit, for 0 ~ 10.00ppt, ±2%F.S for 10.1 ~ 70.0ppt, (2) Temp.: ±0.5℃
2×Resolution	(1) Salinity : 0.01, for 0 ~ 10.00ppt, 0.1 for 10.1 ~ 70.0ppt, (2) Temp.: 0.1
Sensor life time / Battery	> 6 months (with Good Maintenance) / LR44×4pcs.
Dimension / Weight(g)	165×35×h32 mm (LCD Size : 30×18 mm) / 115g
Standard Package	Meter / Battery(LR44×4pcs) / Manual / Paper Box
Cat. No. & Price ₩	**DH.Sal3003** **Set**

Pocket Digital Thermometer "A1.T9233C"

DAIHAN® Digital SOIL Thermometer, with 0~180° Moving Head
With large LCD Display, Pocket-type, −50℃ + 300℃, 0.1℃, 토양 온도계, 180° 무빙헤드

∗ Unique Moving Head for Different Viewing Angle.
∗ Large LCD Display with Digit Height 10mm.
∗ Reduced Tip for Stronger Penetration Force.
∗ Supplied with Protective Probe Cap.
∗ 1 Second Normal Temperature Sensing Time.
∗ CE Approval.

Spec. \ Model	A1.T9233C
Dimension	191×53×53 mm (LCD Size : 37×13 mm)
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for -19.9° ~+199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃~+50℃ or +32°F~+122°F
Weight (g) / Color	40 / Black
Battery / Package	1×1.5 Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC-Probe : od.Φ5/3×L120mm
Cat. No. & Price ₩	**A1.T9233C** **Ea**

DAIHAN® Portable Digital Sound Level Meter, 40~130dB, 0.1dB/1dB Resolution
With Digital Display (30×35mm) & Analog Bar Graph, 휴대용 소음계

Handy Digital Sound Level Meter

* Used for Acoustic (sound that travels through air) Measurements, which had been widely used in the HVAC(Heating, Ventilation and Air Conditioning) or Other Industrial Related Application.
* The Most Cost-effective Best Selling Meter
* with Digital Display (30×35mm) and Analog Bar Graph
* Pocket Size Fashion & Rigid Design
* Auto / Manual Ranging, 4 Measurement Ranges in 10 Steps.
* Fast /Slow Response is selectable.
* A/C Weighting is selectable
* Tripod Mountable
* A weighting enables the meter to respond in the same manner as the human ear.
* C weighting is suitable for flat response measurements with no increase or decrease of amplitude over the frequency spectrum.

Specifications & Ordering information

Spec. \ Model	DH.Sou3
2×Measuring Range	(1) A Weight : 40dB ~ 130dB (2) C Weight : 45dB ~ 130dB
Accuracy at 94dB, 1KHz	±2dB
2×Resolution	(1) Digital Display : 0.1dB, (2) Quasi-Analog Bar : 1dB
Digital / Quasi-Analog Display (4 Range)	40 ~ 70dB, 60 ~ 90dB, 80 ~ 110dB, 100 ~ 130dB
Digital-/ Bar Updating Time	160mS / 40mS
Microphone	Dia.6mm Electric Condenser Microphone
Battery / Battery Life Time	AAA×4pcs / 60 Hours Typical
Dimension / Weight(g)	57×230×44mm(LCD Size : 30×35mm) / 130g
Standard Package	Meter / Battery / Manual / Paper Box
Cat. No. & Price ₩	**DH.Sou3003** **Set**

DAIHAN® Digital Sound Level Meter, with Deluxe Super Large LCD, IEC60651 Type 2 Class Certificated
With Max-Min / Backlight, 30dB~130dB, 세미 아날로그 디지털 소음계

Digital / Analog Sound Level Meter

* Meet IEC60651, type2 Class Standard.
* Using the Background Noise Absorber.
* Deluxe Super Large LCD Display.
* Easy to Calibrate by Standard Calibrator
* AC/DC Analog Output
* Auto/Manual Ranging, 6 Measurement Ranged in 10 Steps.
* Professional and Rigid Design.
* Freezing the Maximum Sound Level Reading.
* Features w/Digital Display and Analog Bar Graph.
* Easy to Replace Battery.
* Max./Min. Recording.
* A/C Weighting is Selectable.
* Backlight Function to Use in Dark Area.
* Automatic Shut off.
* Tripod Mountable.

Hard Carrying Case

Specifications & Ordering information

Spec. \ Model	DH.Sou5
2×Measuring Range	(1) A Weight : 30dB ~ 130dB (2) C Weight : 35dB ~ 130dB
Accuracy at 94dB, 1KHz	±1.5dB
2×Resolution	(1) Digital Display : 0.1dB, (2)Quasi-Analog Bar : 1dB
Digital / Quasi-Analog Display (6 Range)	30 ~ 80dB, 40 ~ 90dB, 50 ~ 100dB, 60 ~ 110dB, 70 ~ 120dB, 80 ~ 130dB
Digital-/ Bar Updating Time	160mS / 40mS
Analog Output	AC 0.707Vrms(at Full Scale) ; DC 10mV/dB
Microphone	Dia.6mm Electric Condenser Microphone
Frequency Range	31.5Hz ~ 8KHz
Battery / Battery Life Time	9V Battery×1pcs. or 9VDC Adaptor / 30 Hours Typical
Dimension & Weight(g)	254×77×h37 mm (LCD Size : 42×62 mm) / 200g
Standard Package	Meter / Battery / Manual / Carry Case
Cat. No. & Price ₩	**DH.Sou3005** **Set**
Option ; DH.Gas3013.1	① USB Cable & Software **Ea**
DH.Gas3013.2	② RS232 Cable & Software **Ea**

DAIHAN® Digital Pro-Tachometer, Contact & Non-Contact 2 in 1 Meter, 10~99999rpm
With Red LED-Beam / Non-Contact, Concave / Convex-Contact Tips, 프로급 타코미터, 접촉/비접촉 겸용

Digital Pro-Tachometer

* Non-Contact Measurement by Red Led Beam
* Contact Rotation Object via Convex or Concave Contact Tips
* Four Rotation Speed Units are Selectable in Contact Mode : rpm, m.min, ft/min, yd/min
* Three Steps to Switch Operation Mode
* Auto Power Off in 20mins inactivity

Specifications & Ordering information

Spec. \ Model	DH.Tac3
3×Measuring Range	(1) Rotation (Non-contact) : 10.0 ~ 99999rpm (2) Rotation (Contact) : 10.0 ~ 19999rpm (3) Surface Speed (Contact) : 1.0000 ~ 9999.9M/Min.
Accuracy / Measuring Distance	±(0.1% of rdg. +2digit) / 5 ~ 30cm (Non-contact)
Resolution	rpm : 0.001 / 0.01 / 0.1 / 1, Others : 0.0001 / 0.001 / 0.01 / 0.1
Time Base & Sampling Time	4.0Mhz Quartz Crystal / 1sec.(> 60rpm), > 1sec.(10-60rpm)
Dimension / Weight(g)	165×51×h32mm (LCD Size : 15×33 mm) / 90g
Standard Package	Meter / Battery / Manual / Reflective Tape / Convex Tip / Concave Tip
Cat. No. & Price ₩	**DH.Tac3003** **Set**

Spare ; DH.Tac3003.1	① Convex Tip for contact Rotate Speed Use	**Ea**
DH.Tac3003.2	② Concave Tip for contact Rotate Speed Use	**Ea**
DH.Tac3003.3	③ Reflective Tape for Non-Contact Rotate Speed, 16×600mm	**Ea**

DAIHAN® Digital Pocket Tachometer, Contact or Non-Contact 2-type, 10~99999rpm
Non-Contact type with Red LED-Beam, Contact type with Convex Tip or Concane Tip, 접촉식 or 비접촉식 타코미터

Non-Contact type
(DH.Tac5)

Contact type(DH.Tac7)

* Safe and Easy to Get Rotation Speed
* Hold Function Freezes Current Reading
* Four Rotation Speed Units are Selectable in Contact Mode : RPM, M/Min, Ft/Min, Yd/Min
* Contact Type : Straight-line Contact with the Center of the Rotating Body
* Non-contact Type : Reflective Tape Affixed to an Object and Measuring the Rotation. (50 to 150mm)
* Auto Power off (20min / Disable)

Specifications & Ordering information

Spec. \ Model	DH.Tac5	DH.Tac7
Measure Range	Rotation(Non-contact) : 10.0 ~ 99999rpm	Rotation(Contact) : 10.0 ~ 19999rpm, Surface Speed(Contact) : 1.000~9999.9M/Min
Accuracy	± (0.1% of rdg. +2digit)	
Resolution	rpm : 0.001 / 0.01 / 0.1 / 1, Others : 0.0001 / 0.001 / 0.01 / 0.1	
Measure Distance	5~30cm	Contact
Power Consumption / Time Base	5uA(Idle), 18mA(Measurement) / 4.0Mhz Quartz Crystal	
Sampling Time / LCD Size	1Second(> 60RPM), > 1Second(10~60RPM) / 33×h15mm	
Battery	1×9V Battery	
Dimension / Weight(g)	124×50×h33mm / ~80g	149×50×h33mm / ~85g
Standard Package	Meter / Battery / Manual / Paper Box / Reflective Tape / Convex Tip / Concave Tip	
Cat. No. & Price ₩	**DH.Tac3005** **Set**	**DH.Tac3007** **Set**

Spare ; DH.Tac3003.1	① Convex Tip for contact Rotate Speed Use	**Ea**
DH.Tac3003.2	② Concave Tip for contact Rotate Speed Use	**Ea**
DH.Tac3003.3	③ Reflective Tape for Non-Contact Rotate Speed, 16×600mm	**Ea**

DAIHAN® Handy/Digital Thermo-Hygrometer, Rotary Sensor Protector, ℃/°F & R.H%, Max/Min
With Large LCD, Rubber Coated & Black Carrying Case, −50℃~+70℃, 20~99.9% R.H, 0.1 Divi, 포켓/디지털 온습도계

CE

Size :
165×38×18 mm

"A1.H9237"

* Ideal for Storage Rooms, Pharmaceutical Rooms, Greenhouse, Laboratory, etc.
* Pocket Size with Large LCD.
* Rubber Coated.
* Low Battery Indicator.
* Rotary Sensor Protector Protects The Sensor when not in Use.
* Battery Included.
* Easy to Change Battery.
* with Black Carrying Case.
* CE Approval.

Specifications & Ordering information

Spec. \ Model	A1.H9237
Measurement Range	−50℃ ~ +70℃ or −58°F ~ +158°F / 20% ~ 99.9% R.H (No Condensation)
Resolution	0.1° for Whole Range/ 0.1% R.H for Whole Range
Accuracy	±1.0℃ or ±1.8°F In the Range of −0℃ ~ +50℃ or −4°F ~ +122°F, Otherwise more than ±1.0℃ or ±1.8°F
Sensor Type	NTC & Humidity
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	55g / White
Battery / Package	1×3 Volts "CR 2032" Size or Equivalent / White Box
Dimension	165×37×18 mm (LCD Size : 58×12 mm)
Cat. No. & Price ₩	**A1.H9237** Ea

DAIHAN® 2 & 3-row Jumbo Display Thermo-Hygrometer, for Indoor / Outdoor, ℃/°F & R.H%
With 3m Cord/Probe, Memory Recalling, −50~+70℃, 20~99.9% R.H, 0.1 Divi, 2 & 3열 실내·외 온습도계

CE

Size :
120×110×25 mm
(1) Jumbo 2-Row Display , "A1.H9213"

Stand & Hanger

* Ideal for Office, Home, Greenhouse, Laboratory.
* (1) Dual or (2) Triple Row Display for Easy Reading.
* Comfortable and Uncomfortable Index (Comfort/Warm/Cool).
* Jumbo LCD.
* 3m Sensor Wire with Probe for Outdoor Temperature Measurement.
* (1) Dual or (2) Triple Row Display for Easy Reading.
* Temperature Unit ℃/°F Selectable.

(1) With 2-Row Jumbo Display ; On/Off, ℃/°F, Max/Min (℃/°F), Temperature and Humidity, Indoor Humidity Measurement Indoor/Outdoor Temperature Measurement, Memory Recalling.

Specifications & Ordering information

Spec. \ Model	A1.H9213
Measurement Range	−50℃ ~ +70℃ or −58°F ~ +158°F / 20% ~ 99.9% R.H (No Condensation)
Resolution	0.1° for Whole Range/ 0.1% R.H for Whole Range
Accuracy	±1.0℃ or ±1.8°F In the Range of −20℃ ~ +70℃ or −4°F ~ +158°F Otherwise more than ±1.0℃ or ±1.8°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	165g / White
Battery / Package	2×1.5 Volts "AAA" Size or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC & Humidity External Sensor : 3m Sensor Wire with Probe(L22.5×Φ5.5mm)
Dimension	120×110×25 mm (LCD Size : 72×61 mm)
Cat. No. & Price ₩	**A1.H9213** Ea

CE

Size :
120×110×25 mm
(2) Jumbo 3-Row Display , with Alarm Timer
"A1.H9216"

Stand & Hanger

(2) With 3-Row Jumbo Display, with Alarm Timer ; On/Off, ℃/°F, Max/Min (℃/°F), Temperature and Humidity Memory Recalling, Clock (HH/MM/SS), Alarm/Snooze Set, 12hr or 24hr Format Selectable, Indoor/Outdoor Temperature Measurement, Indoor Humidity Measurement.

Specifications & Ordering information

Spec. \ Model	A1.H9216
Measurement Range / Alarm Timer	−50℃ ~ +70℃ or −58°F ~ +158°F / 20% ~ 99.9% R.H (No Condensation) Alarm Timer Function
Resolution	0.1° for Whole Range/ 0.1% R.H for Whole Range
Accuracy	±1.0℃ or ±1.8°F In the Range of −20℃ ~ +70℃ or −4°F ~ +158°F, Otherwise more than ±1.0℃ or ±1.8°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	165g / White
Battery / Package	2×1.5 Volts "AAA" Size or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC & Humidity External Sensor : 3m Sensor Wire with Probe(L22.5×Φ5.5mm)
Dimension	120×110×25 mm (LCD Size : 72×61 mm)
Cat. No. & Price ₩	**A1.H9216** Ea

DAIHAN® Desktop / Wallmount Dew-point Thermo-Hygrometer of Temp / RH% / DP℃, Max/Min, Hold
Programmable Danger Zone, Alarm 65dB, Time Clock, 0~50℃, 20~90% RH, −20+70℃ DP, 탁자 / 벽걸이용 이슬점 온습도계

B. SD-Card Logging Dew-point Thermo-Hygrometer

(DH.Thh9 only)

* Simultaneously Displays Temperature and Humidity
* Temperature Unit ℃/℉ Switchable
* Check Humidity Condense Conditions Through Dew Point
* Max/Min Function to Review Data
* Real Time Display(Hour & Minute, AM/PM)
* Programmable Danger Zone for Warning Purpose
* Audible Beeper and Bright Red Led for Danger Zone Warning
* Long Battery Life One year Via Alkaline Battery
* Designed with Capacitance type humidity Sensor to Get Accurate and Quick Reading
* Advanced SD Card Logging Design for Continuous Recording(DH.Thh9 only)

Specifications & Ordering information

Spec. \ Model	A. DH.Thh7	B. DH.Thh9
3×Measuring Range	(1) Temp.: 0 ~ 50℃(display : −10.0 ~ 70.0℃), (2) Humidity : 20 ~ 90%RH(Display : 0% ~ 99.9%RH), (3) Dew Point : −20 ~ 70℃	
2×Accuracy	(1) Temp.: ±1℃, (2) Humidity: ±5%RH (at 25℃, 10 ~ 90%RH, other ±7%RH)	
2×Resolution	(1) Temp.: 0.1℃/℉, (2) Humidity : 0.1%RH	
Temp. Response Time	2 mins	
SD Card	-	Max. 2GB SD Card or 4GB SDHC Card
Battery	3×AA Battery	3×1.5Volts AA Battery or 5V Adaptor
Dimension / Weight(g)	110×91×h30mm(LCD Size : 63×70 mm) / 200g	
Standard Package	Meter / Battery / Manual / Paper Box	Meter / Adaptor / Manual / Paper Box / 256MB SD Card
Cat. No. & Price ₩	DH.Thh3007 Ea	DH.Thh3009 Ea

DAIHAN® Temp ℃/℉ & RH% USB Datalogger with PDF Report, −30+70℃, 0.1~99.9% RH
Auto-Generate a PDF & Excel Report while Plugged into PC, Programmable by Users, 온습도 측정 및 Data 로거

USB Datalogger

* Software & Driver are not required for any operation
* High Accuracy Thermistor and Capacitive RH Sensor
* Only 3 Steps to Operate : ①Plug to program ②Press Start to Activate ③Plug again to Generate PDF/Excel report
* Completely Programmable by Users for Maximum Flexibility includes : 6 Languages, Sampling Interval, Start Delay, Alarm Delay, Unit, Alarm Range, Alarm Type, Password and User Name
* Designed with Comprehensive Usage with Waterproof Function(IP 67)
* EN12830 and RoHS Compliance

Specifications & Ordering information

Spec. \ Model	DH.Thh3	
	Temperature	Humidity
Measure Range	NTC Thermistor, −30~70℃, −22~158℉	Capacitor, 0.1 ~ 99.9%RH
Accuracy	±0.5℃	±3% (at 25℃, 10 ~ 90%), others ±5%
Resolution	0.1℃ / 0.1℉	0.1%RH
Battery	2×CR2032(3.0 V) Battery	
Dimension / Weight(g)	110×45×h17mm / 80g	
Standard Package	Logger / Manual / Paper Box	
Cat. No. & Price ₩	DH.Thh3003 Set	

DAIHAN® Temp/Humidity/Barometric Bluetooth Datalogger, −30+70℃, 0.1~99.9% RH, 300~1100hPa NEW
Generate PDF & Excel Report Through APP, Real Time Check without Stopping, 온습도 및 기압 Data 로거

Bluetooth Datalogger

* Programming Logger & Download Data Wirelessly Through Advanced Bluetooth 4.0 Technology
* Generate and Send Out PDF Report Through APP. Report Contains Data Summary, Graph and Detailed Data
* Check Real Time Data on APP Anytime Download Data to APP without Sopping Recording.
* Designed with Comprehensive Usage with Waterproof Function(IP 65)
* EN12830 and RoHS Compliance
* Please Search for "Nice Logger" in APP Store.

Specifications & Ordering information

Spec. \ Model	DH.Thh15		
	Temperature	Humidity	Barometric
Measure Range	NTC Thermistor, −30~70℃, −22~158℉	Capacitor, 0.1 ~ 99.9%RH	300~1100hPa 8.9~32.5inHg
Accuracy	±0.5℃	±3% (at 25℃, 10 ~ 90%), others ±5%	±3hPa(0~60C), ±5hPa(−20~0C)
Resolution	0.1℃ / 0.1℉	0.1%RH	0.1hPa, 0.1inHg
Ambient Temp.	−30~70℃, (Humidity < 90%)		
Battery	CR2(3.0 V) Battery×1pc		
Dimension / Weight(g)	70×50×h23mm (Body), 30×18(LCD)/ 80g		
Standard Package	Logger / Manual / Paper Box / Battery		
Cat. No. & Price ₩	DH.Thh3015 Ea		

DAIHAN® Pocket Dew-point Thermo-Hygrometer of Temp / RH% / DP℃ / WB℃, Max/Min, Hold
Optional External Temp Probe(−20+70℃), −20+50℃, 0~100% RH, −78.7+50℃ DP, 포켓 다기능 이슬점 온습도계

Pocket Dew-point
Thermo-Hygrometer

* Designed with Capacitance-type Humidity Sensor to get Accurate and Quick Reading
* Simultaneously Triple Display Temp. / RH% / External Probe Temp
* Maximum / Minimum and Reset function
* External Probe for Checking Food Quality & HVAC/R Applications
* Temperature unit ℃/℉ Selectable
* Auto Power Off time frame Selectable
* Hold function to Freeze current Reading

Specifications & Ordering information

Spec. \ Model	DH.Thh5	
4×Measuring Range	(1) Temp. : −20 ~ 50℃, (2) Humidity : 0%RH ~ 100%RH, (3) Dew Point : −78.7 ~ 50.0℃, (4) Wet Bulb : −21.6 ~ 50.0℃	
2×Accuracy	(1) Temp. : ±0.6℃, (2) Humidity : ±3%RH (at 25℃, 10 ~ 90%RH, other ±5%RH)	
2×Resolution	(1) Temp. : 0.1℃/℉, (2) Humidity : 0.1%RH	
Battery	2×AAA Battery	
Dimension / Weight(g)	48.4×178.5×h24.7mm(LCD Size : 28×33 mm) / 100g	
Standard Package	Meter / Battery / Manual / Paper Box	
Cat. No. & Price ₩	**DH.Thh3005**	**Set**

Option ;	**DH.Gas3007.1**	① Cal. Salt Bottle for Calibration, 33%, 56ml	**Ea**
	DH.Gas3007.2	② , 75%, 56ml	**Ea**
	DH.Thh3005.1	③ External Temp. Probe, 116cm, with Handle	**Ea**

DAIHAN® Handy Dew-point IR Thermo-Hygrometer for Air & Surface Temp / RH% / DP℃
Built in Laser-Beam, Backlight, PC Data Analysis, −40+500℃ IR, 0~100% RH, −68+49.9℃ DP, 휴대용 IR 온습도계

Handy Dew-point IR Thermo-Hygrometer

Hard Carrying Case

* The Most Popular IR+ Humidity Two in One Meter
* Consist of ; Meter, Battery, Manual, Carry Case
* Triple Display Measures Air/Surface Temp. & Humidity
* Design with Precision Humidity Sensor
* Gear Damper Device (Design Patent) for Sensor Protection
* Auto Power off Time Adjustable
* IR Emissivity Value Adjustable 0.3~1.0
* Built-in Laser Beam (670nm) for Targeting
* Powered by 4pcs AAA Batteries
* Temperature Unit ℃/℉ is Switchable
* Laser Beam & Backlight Function Selectable
* PC Output Data Download

Specifications & Ordering information

Spec. \ Model	DH.Thh11		
Measure Range	−40 ~ 500℃	−20 ~ 50℃	0 ~ 100%RH
Resolution	0.1℃ / 0.1℉	0.1℃ / 0.1℉	0.1%RH
Accuracy	±2℃ at 20 ~ 200℃, Others is ±3℃	±0.6℃	±3%RH (at 25℃, 10 ~ 90%RH, others ±5%RH)
3×Measuring Range	(1) IR Temp.: −40 ~ 500℃, (2) Temp.: −20 ~ 50℃, (3) Humidity : 0 ~ 100%RH		
3×Accuracy	(1) IR Temp.: ±2℃ at 20 ~ 200℃, Others is ±3℃, (2) Temp: ±0.6℃, (3) ±3%RH (at 25℃, 10 ~ 90%RH, others ±5%RH)		
3×Resolution	(1) IR Temp.: 0.1℃/℉, (2) Temp.: 0.1℃/℉, (3) Humidity : 0.1%RH		
Dew Point & Wet Bulb Temp.	−68 ~ 49.9℃ & −21.6 ~ 49.9℃		
IR Repeatability	±1℃		
Emissivity	0.3 ~ 1.0 adjustable		
Dimension / Weight(g)	70×50×h175mm(LCD Size : 44×26 mm) / 140g		
Standard Package	Meter / Battery / Manual / Carry Case		
Cat. No. & Price ₩	**DH.Thh3011**		**Ea**

Option ;	**DH.Gas3013.1**	① USB Cable & Software	**Ea**
	DH.Gas3013.2	② RS232 Cable & Software	**Ea**

DAIHAN® Compact Gun type IR(infrared) Thermometer, Comply with FDA Standard Class Ⅱ, Temp −40℃~+500℃
With Ergonomic Hand Grip, ℃/℉ 비접촉 적외선(IR) 온도계

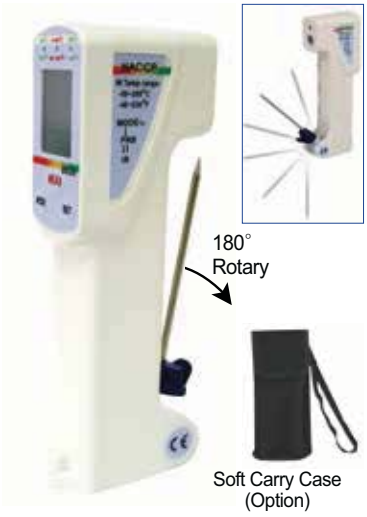
Gun type IR Thermometer — Soft Carry Case (Option)

* Built in Laser Beam(670nm, <1mw) for Targeting.
* Product Complies with FDA Standard Class Ⅱ
* Adjustable Emissivity from 0.3 to 1.0 for Metal and Non-Metal Surface Measurement.
* Quick and accurate IR Response Time : 500ms.

Specifications & Ordering information

Spec. \ Model	DH.The13	
Measurement Range	−40℃ ~ +500℃	
Temp Accuracy	±2% or ±2℃ at −20℃ ~ +200℃, others ±3% or 3℃	
Resolution	0.1℃/℉ for −40℃ ~ +110℃, 1℃/℉ for others	
Repeatability / Distance Ratio	±1℃ / 10 : 1	
Battery	1×9V Battery	
Dimension & Weight(g)	80×45×h157 mm (LCD Size : 21.8×31.8 mm) / 140g	
Standard Package	Meter / Battery / Manual / Paper Box	
Cat. No. & Price ₩	**DH.The3013**	**Set**
Option ; DH.The3013.1	Soft Carry Case(Pouch), Black for DH.The3013	**Ea**

DAIHAN® Waterproof IP65 IR(infrared)+Contact Pt-Probe Thermometer, with Laser-pointer, MAX/MIN
With 180° Rotary Piercing Probe 8cm / Timer / Data-hold / ℃ / ℉, −40℃+280℃/0.1℃, 접촉+비접촉 겸용 IR 온도계



Waterproof IR & Probe Thermometer

* Follow HACCP Principle to Check Food Safety
* IP65 Waperproof Targeting, Washable Probe
* Quick to Inspect Danger Zone Temperature
* Big LCD with Backlight to Display Measured Temperature
* Flip over Probe for Internal Temperature Measurement
* Built-in Laser to Highlight the Area
* Certified HACCP
* Temperature Unit C/ F is Switchable
* Auto Power off in 20 mins Inactivity
* Quick and Accurate IR Response Time : 500ms
* Count down Timer Ensure Food Safety Storage
* Max Reading Displays while in IR Scanning Status

Specifications & Ordering information

Spec. \ Model	DH.The15	
2×Measuring	(1) IR Temp. : −40 ~ +280℃, (2) Probe Temp : −40 ~ +200℃	
Accuracy	(1) IR Temp.: [<0℃(32℉)] : +/−1℃(2℉)+/−0.1, [0~65℃(32~150℉)] : +/−1℃(2℉), [>65℃(150℉)] : +/−1.5% of rdg, (2) Probe Temp.: [<−5℃(23℉)] : +/−1℃(2℉) [>65℃(150℉)] : +/−1℃ or 1.5% of rdg, [−5 ~ 65℃(23 ~ 150℉)] : +/−0.5℃(1℉)	
Resolution	(1) IR Temp.: 0.1℃/℉, (2) Probe Temp.: 0.1℃/℉	
D:S ratio / IR Repeatability / Emissivity	3:1 / ±1℃ / 0.97	
Battery	1×9V Battery or Adaptor	
Dimension / Weight	61.5×35.5×167 mm (LCD Size : 21×28mm) / 140g	
Standard Package	Meter / Battery / Manual / Paper Box	
Cat. No. & Price ₩	**DH.The3015**	**Set**
Option ; DH.The3015.1	Soft Carry Case(Pouch) 176×75×h35mm, Black for DH.The3015	**Ea**

DAIHAN® High Temp IR(Infrared) Thermometer, with Large LCD & Laser-pointer, Temp −40℃~+816℃
With Wrist Strap & Hard Carry Case & Soft Carrying Pouch, ℃/℉ 비접촉 적외선(IR) 온도계

High Temp IR(Infrared) Thermometer

* Built in Laser Beam(670nm, <1mw) for Targeting.
* Quick and accurate IR Response Time: 500ms.
* Rubber-Like Hand Grip Design.
* Large LCD w/ Backlight Function.
* Adjustable Emissivity from 0.3 to 1.0
* Easy Flip Battery Compartment Design.

Specifications & Ordering information

Spec. \ Model	DH.The17	
Measurement Range	−40℃ ~ +816℃	
Temp Accuracy	< 0℃ : ±2℃ / 0℃ ~ 300℃ : ±2% or ±2℃ 300℃ ~ 500℃ : ±2.5% / > 500℃ : ±3%	
Resolution	0.1℃/℉(<300℃), 1℃/℉(>300℃)	
Distance Ratio / Battery	12 : 1 / 2×AA Battery	
Dimension & Weight(g)	195×134×h50 mm (LCD Size : 34×37 mm) / 240g	
Standard Package	Meter / Battery / Manual / Hard Carry Case / Wrist Strap / Soft Carrying Pouch	
Cat. No. & Price ₩	**DH.The3017**	**Set**
Spare ; DH.The3017.1	Soft Carry Case(Pouch) 200×133×h42mm, Black for DH.The3017	**Ea**

DAIHAN® IP67 Waterproof Digital Thermocouple Thermometer, with K-Probe
With 10 Sets Memories Data Storage, Recalling & Clearing, −100℃+800℃, 방수 / 휴대용 1채널 디지털 온도계

Digital Thermocouple Thermometer

∗ Max/Min (°C/°F) Memory Recalling. ∗ EL Backlight for Use in Dim Light Environment.
∗ Alerting Alarm Beeps when Temperature Reaches/Beyond the Pre-set Limit
∗ Built in Holster with Flip Out Stand at the Back of the Unit. ∗ Low Battery Indicator

Specifications & Ordering information

Spec. \ Model	A1.TC9227A
Measurement Range	−100℃ ~ +800℃ or −148°F ~ +1472°F
Resolution & Accuracy	0.1°, and ±2℃
Water Proof & Weight	IP67 and 185g(only main unit) / Grey&Yellow
Battery	3×1.5Volts “AAA” Size or Equivalent
Sensor Type	K - Probe : od.Φ3.5×L110mm Plastic Handle : od.Φ17×L165mm, Cable : od.Φ4×L1050mm
Dimension	54×165×25 mm (LCD Size : 32×23 mm)
Cat. No. & Price ₩	**A1.TC9227A** **Ea**

DAIHAN® Portable Digital 2-Channel Thermocouple Thermometer, K / J / E / R / T/ N / S-Type Probe Acceptable
With △T=T1-T2/Max-Min/Avg/Memory, Without Probe, −200℃~+1370℃, 0.1 Divi., 휴대용 2채널 디지털 온도계

2-Channel Thermocouple Thermometer
with Optional Probes

■ ***Multiple Thermocouple(Type K, J, T, E, N, R, S) Compatible***
∗ 2 Channel Reading (T1 & T2). ∗ Differential Temperature Measurement (△T=T1–T2).
∗ 30 Sets Data Storage ∗ 7″ Large LCD with Function Indicators and Backlight.
∗ Alarm Beeps when Temperature Reaches/ Beyond/ The Pre–Set Limit. ∗ Audible Alarm.
∗ Optional PVC Holster with Flip Out Stand at the Back of the Unit. ∗ Low Battery Indicator.

Specifications & Ordering information

Spec. \ Model	A1.T9214T
Measurement Range	K-Type : −200℃ ~ +1370℃ or −328°F ~ +2498°F, Clock-Timer, Alarm
Resolution	0.1° for Whole Range
Accuracy	±0.05% of Reading +0.3℃(+0.5°F) Below −100℃(+148°F); Add 0.15%
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	310 / Yellow·Grey
Battery / Package	Battery Included ; 4×1.5Volts “AAA” Size or Equivalent / White Box
Sensor Type	Type K, J, E, T, N, R, S Thermocouple Acceptable ; Not Include
Dimension	81×172×33 mm (LCD Size : 59×35 mm)
Cat. No. & Price ₩	**A1.T9214T ; Without Probe** **Ea**

※ Option ; K-Probes ⇒ See the 154 Page.

DAIHAN® RS232 / PC Data Analysis Thermometer, with Dual Input & Multiple-Type Probe, Compatible
With Time Clock / Backlight, K / J / T / R / S / E-Probe in Use, −200~+1370℃ in K-Type, 2채널 다기종 센서 수용 온도계

∗ Non Sleep Mode Function available, Unit ℃/°F is Switchable, Super Big LCD for easy Reading.
∗ RS232 interface for PC download, Data records stamped with real time clock, Backlight for dark area operation.

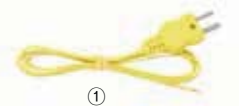
Specifications & Ordering information ∗ Hold Function to Freeze Current Reading

Spec. \ Model	DH.The7
6×Measuring Range	(1) K-temp.: −200 ~ 1370℃, (2) J-temp.: −200 ~ 760℃, (3) T-temp.: −200 ~ 390℃, (4) R-temp.: 0 ~ 1760℃, (5) S-temp.: 0 ~ 1760℃, (6) E-temp.: −200 ~ 736℃
Accuracy	(1) K- / (2) J- / (3) T- / (6) E-temp.: ±(0.1% rdg + 0.7℃) (4) R- / (5) S-temp.: ±(0.3% rdg + 0.7℃)
Resolution	(1) K-temp.: 0.1℃ for −200 ~ 650℃, 1℃ for 640 ~ 1370℃, (2) J-temp.: 0.1℃ for −200 ~ 500℃, 1℃ for 490 ~ 760℃, (3) T-temp.: 0.1℃ for −200~390℃, etc.
Battery	9V×1pc or Adaptor
Dimension / Weight(g)	182×72×h30 mm(LCD Size : 30×51 mm) / 150g
Standard Package	Meter / K Bead Probe / Battery / Manual
Cat. No. & Price ₩	**DH.The3007** **Set**

Spare ;	**DH.The3007.1**	① 4m K-Bead Thermocouple	**Ea**
Option ;	**DH.Gas3013.1**	② USB Cable & Software	**Ea**
	DH.Gas3013.2	③ RS232 Cable & Software	**Ea**
	DH.The3007.2	④ Rubber Holster, Blue	**Ea**

DAIHAN® Wallmount / SD-card Logging 4-Channel K-type Thermometer, −200℃~+1370℃
Ultimated Auto-Logging Memories in SD-card, with 2 Bead K-Probe/Alarm & Time Clock, 벽결이 4채널 SD로거/온도계

SD-Card Logging K-type Thermometer



①

▶ **No-Bothering Computer Setting! Auto-Log Anytime/Anywhere!**

* Super Big LCD Portable / Wallmount SD-card Logger Measures Temperature via K-type Thermometer
* Hold Function Freezers Current Readings, Checking Max / Min Value from Power On
* Blue Backlight
* One Button Press to Display T1-T2, Display Temperature Change from Baseline
* 12/24 hour Timer

Specifications & Ordering information

Spec. \ Model	DH.The9
K temp range / Resolution	−200 ~ 1370℃, −328 ~ 2498°F / 0.1℃, 0.1°F
K temp accuracy	±(0.3% rdg +1℃)
Sampling rate	Programmable from 1 second up
Battery	4×AA Battery 9V adaptor ; Low Battery Indicator
Dimension / Weight(g)	152×100×h39mm(LCD Size : 47×104 mm) / 300g
Standard Package	Meter / 2×Bead Probe / Battery / Manual / SD-card / Plain Box

Cat. No. & Price ₩	DH.The3009	Set
Option ; DH.The3009.1	① 1m K-Bead Thermocouple	Ea
DH.The3009.2	② Universal Plug 9V Adaptor	Ea

DAIHAN® Foldable / Portable Digital Multi-Thermometer-Set, with 4 K-type Probe
With 180° Moving Probe Connector, Timer(Count Up), −200℃~+1370℃, 0.1 Divi.
With 4 K-Probe for Air / Immers. / Penetrat. / Surface, and Carrying Case, 휴대용 접이식 디지털 온도계 셋트

Foldable/Portable Digital Multi-Thermometer-Set

■ ***Ideal for Multi-use with Multi-Function in Lab & Industry***

* Unique Feature of Folding Probe
* Four Probes Included
* Easy to Operate
* Probe Connector is Adjustable Through 45°, 90°, 135°, 180°
* CE Approval
* Comprehensive and Variety Use
* Large LCD
* Battery Included
* Four Probes Included for Different Measurement (e.g. Surface, Semi-Solid, Air)
* Extra Carrying Box for Easy and Protective Storage
* High Degree of Accuracy

Function : On/Off, Hold/Test, ℃/°F, Max/Min (℃/°F) Memory Recalling, and Timer.

Specifications & Ordering information

Spec. \ Model	A1.T9218
Measurement Range	−200℃ ~ +1370℃ or −328°F ~ +2498°F, Timer
Resolution	0.1° for Whole Range
Accuracy	±1.0℃ or ±1.8°F In the Range of −49℃ ~ +740℃ or −56.2°F ~ +1364°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	80 / Black
Battery / Package	2×3Volts "CR 2032" Size or Equivalent / Black Carrying Case
Sensor Type	Included 4×Type K Thermocouple
Dimension	153×50 ×19 mm (LCD Size : 50×22 mm)

Cat. No. & Price ₩	A1.T9218	Ea
Spare ; A1.TK069T	① Surface Probe, K-type	Ea
; A1.TK066A	② Airflow Probe, K-type	Ea
; A1.TK148O	③ Immersion Probe, Round, K-type	Ea
; A1.TK133S	④ Penetration Probe, K-type	Ea

Digital Temp Controller / Displayer for K-type Probes
With Female Minisocket for Miniplug, −50℃+400℃, 디지털 온도측정 / 조절계

■ ***Made in Korea***

■ ***Ideal for Temp Control of Reactor-system***

* Ideal for Temperature Monitor / Controller for Reactor System
* With K-type Probe Connector & Electronic Cable 2m
* Jumbo LCD with Digit Height 18mm
* 100~240VAC Free
* Dimension : 90×70×h50mm
* High Accuracy

※ **Note : The Controller Can be used in other Cable & Plug System.**

		Ea.	Price, ₩
SL.The5011	Digital Temp. Controller/Displayer-Set, –50℃~+400℃, K-type		

Articles	Cat. No	Description

Cowie® K-type PTFE Encapsulated Stainless-steel Thermocouple Probe, Can be Bent, −180℃+280℃
With Miniplug & PFA Insulated 1m & 2m Cable, Probe Body L100~900mm, PTFE 내약품 / 내부식 / 청결형 온도 프로브

■ ***Made in UK.*** ■ ***Ideal for Reactor : Especially Long Body Probes***

∗ Outstanding Chemical Resistance, No-Contamination of Working Media, and Pressure Resistant
∗ Fully Pure PTFE Encapsulated Stainless-steel Core Probe for Rigidity, But can be Bent
∗ with Push-On Ferrule ∗ Response : 50% in 6~14 seconds, -180℃+280℃

(1) With L100~L700mm Probe-body and 1m Cable

		Ea.	Price,₩
CW.600.101.1	PTFE Capsulated K-probe, Body-Φ6×L100, Ferrule-L35mm, Total -L135mm		
CW.600.201.1	-Φ7×L200, -L40mm, -L240mm		
CW.600.301.1	-Φ8×L300, -L40mm, -L340mm		
CW.600.401.1	-Φ8×L400, -L50mm, -L450mm		
CW.600.501.1	-Φ9×L500, -L60mm, -L560mm		
CW.600.601.1	-Φ9×L600, -L60mm, -L660mm		
CW.600.701.1	-Φ9×L700, -L45mm, -L745mm		

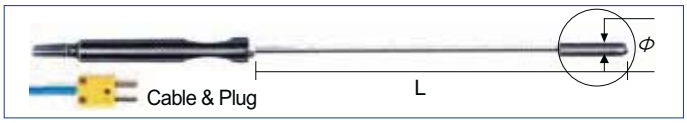
(2) With L900mm Probe-body and 2m Cable

		Ea.	Price,₩
CW.600.901.1.2	PTFE Capsulated K-probe, Body-Φ9×L900, Ferrule-L45mm, Total-L945mm		

K-type Thermocouple Probe, for Wide-range Temp. −160℃~+1200℃
With Common use Plug "Miniature 2 Flat" and Cable, "K-형" 온도계 & 각종 열기구 온도 프로브

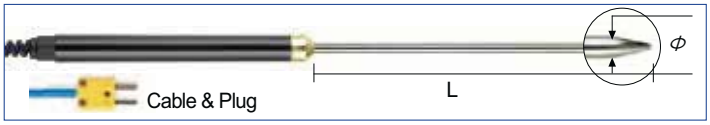
■ ***K-Type Sensor Probes for Different Applications (Penetration Probe, Surface Probe, Pipe Clamp)*** ■ ***Cable : od.Φ3×L1020 mm***
■ ***Miniature 2 Flat (L14×Thick 1mm) Plug Type*** ■ ***Handle : Thermo Plastic od.Φ17×L170 mm***

(1) For Liquid & Air, Stainless-steel Probe, Resin Handle with Cable/Plug, −160℃~+1200℃



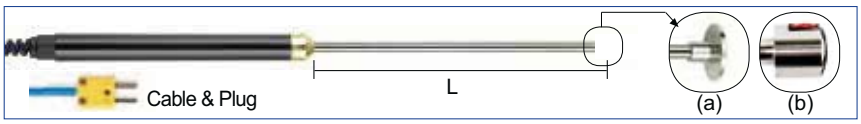
		Ea.	Price, ₩
AS1.5522.04	Liquid/ Air Probe "K", −160~+700℃, Φ1.0×L306mm, 1m Cable/Plug		
DH.WHP503040	, −60~+600℃ , Φ4.8×L250mm, 1.8m Cable/Plug		
DH.WHP503050	, −60~+500℃ , Φ4.8×L380mm, 1.8m Cable/Plug		

(2) For Semi - solid Penetration-type, Stainless-steel Probe, Resin Handle with Cable/Plug, −100℃~+1000℃



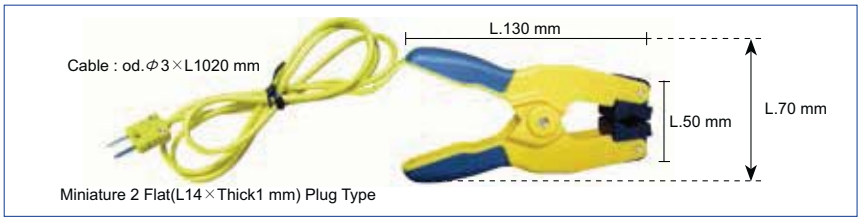
		Ea.	Price, ₩
A1.TK175S	Penetration Probe "K", −100~+800℃ , Φ3.2×L150mm, 1m Cable/Plug		
A1.TK225S	, −100~+1000℃, Φ6.4×L200mm, 1m Cable/Plug		

(3) For Surface / Contact, Stainless-steel Probe, Resin Handle with Cable/Plug, −100℃~+400℃



		Ea.	Price, ₩
A1.TK004T	(a) Surface Probe "K", Head : Φ15×t1.5, Stem : Φ3.5×L180mm, −100~+400℃,1m Cable/Plug		
A1.TK033T	(b) : Φ16×t14 , Stem : Φ6.5×L215mm, −100~+400℃,1m Cable/Plug		

(4) Pipe Clamping Probe, with Cable Plug, −100℃~+120℃



		Ea.	Price, ₩
A1.TK0063	Pipe Clamp Probe, Pipe / Tubing, Φ6 ~ 22 mm Grip −100℃ ~+120℃		

DAIHAN® IP67 Waterproof Digital Thermocouple Thermometer, with 1 NTC-Probe
With 10 Sets Memories Data Storage, Recalling & Clearing, −50℃~+300℃, 방수 / 휴대용 1채널 디지털 온도계

* Max/Min (°C/°F) Memory Recalling.
* 1 Second Normal Temperature Sensing Time.
* Alerting Alarm Beeps when Temperature Reaches/Beyond the Pre–set Limit
* EL Backlight for Use in Dim Light Environment.
* Optional One Hour Auto Shut Off
* Supplied with Sensor Probe and Plastic Handle Assembled Together
* CE Approval.
* PVC Holster with Flip Out Stand at the Back of the Unit.
* Low Battery Indicator.

Specifications & Ordering information

Spec. \ Model	A1.T9234
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color /Water Proof	280 / Grey・Yellow / IP 67
Battery / Package	2×1.5Volts "AAA" Size or Equivalent / White Box
Sensor Type	NTC Probe : od.Φ3.5×L110mm Plastic Handle : od.Φ17×L120mm, Cable : od.Φ4×L1450mm
Dimension	77×172×46 mm (LCD Size : 51×32 mm)
Cat. No. & Price ₩	**A1.T9234** **Ea**

DAIHAN® IP67 Waterproof Digital 2-Channel Thermocouple Thermometer, with 2 NTC-Probe
With 10 Sets Memories Data Storage, Recalling & Clearing, 50℃~+300℃, 방수 / 휴대용 2채널 디지털 온도계

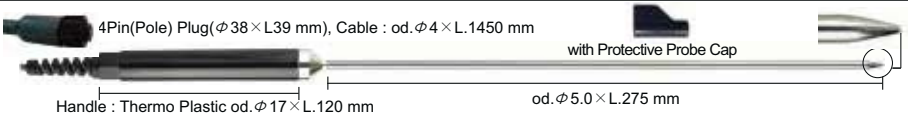
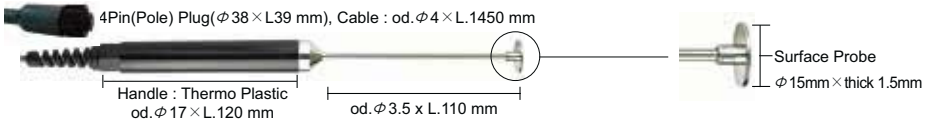
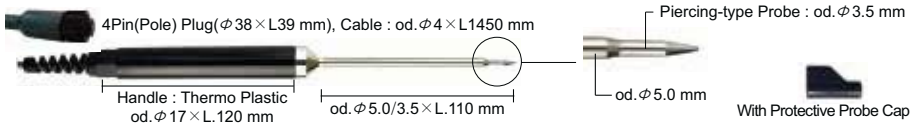
* Convenient Function for Calculating Differential Temp-Measurement (△T = T1 – T2).
* Alerting Alarm Beeps when Temperature Reaches/Beyond the Pre-Set Limit
* CE Approval.
* 1 Second Normal Temperature Sensing Time.
* EL Backlight for Use in Dim Light Environment.
* Low Battery Indicator.
* Universal Kit Set with Two Stainless-steel Probes Together.

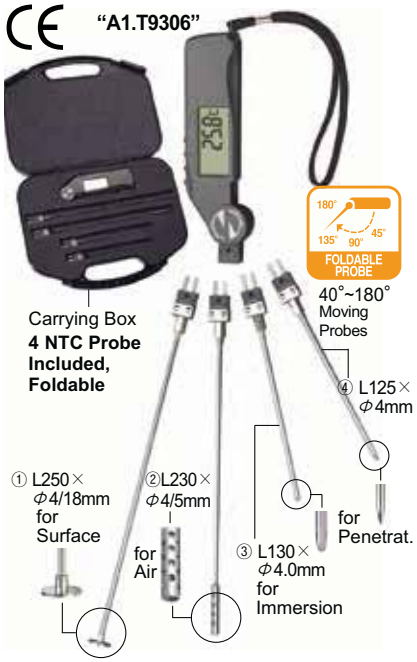
Specifications & Ordering information

Spec. \ Model	A1.T9234T
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color /Water Proof	280 / Grey・Yellow / IP 67
Battery / Package	2×1.5Volts "AAA" Size or Equivalent / White Box
Sensor Type	NTC Probe : od.Φ3.5×L110mm Plastic Handle : od.Φ17×L120mm, Cable : od.Φ4×L1450mm
Dimension	77×172×46 mm (LCD Size : 51×32 mm)
Cat. No. & Price ₩	**A1.T9234T** **Ea**

DAIHAN® NTC-type Probe, for NTC-type Thermocouple Thermometer

(1) Penetration Probe : Suitable Semi-Solid, Liquid, Air-Temperature.
(2) Surface Probe : Superior Contact, Plate-Temperature.
(3) Robust Piercing Probe : Stronger Penetration Force, Rapid Response Time, Suitable for Frozen Food.

Cat. No.	Dimension	Temperature °C / °F / Others	Ea. Price, ₩
(1) **A1.TN0300**		**Penetration,** −50°C ~+300°C / −58°F ~+572°F, Very Sharp Tip	
(2) **A1.TN133T**		**Surface,** −50°C ~+300°C / −58°F ~+572°F, Thin/Flat Disk	
(3) **A1.TN332C**		**Robust Piercing,** −50°C ~+300°C / −58°F ~+572°F, Stronger Penetration Force	



DAIHAN® Foldable / Handy Digital Multi-Thermometer Set
With 4 NTC-Probe & 180° Moving Probe, −50℃~+300℃, 휴대용 접이식 온도계

* Stainless-steel Probe Adjusts From 0° To 180°.
* CE Approval.
* Jumbo LCD with Digit Height 18mm.
* Low Battery Indicator.
* Black Carrying Case with EVA Foam for Protective and Convenient Carriage.
* 1 Second Normal Temperature Sensing Time.

Specifications & Ordering information

Spec. \ Model	A1.T9306
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of -30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature for Plastic Case	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	65 / Grey
Battery/ Package	1×1.5Volts "A76" Size (LR44, G13) or Equivalent / Black Carrying Case
Sensor Type	Included 4 Type NTC Thermocouple
Dimension	154×41×17 mm (LCD Size : 50×23mm)
Cat. No. & Price ₩	**A1.T9306** Ea

DAIHAN® Module / Handy Solar Digital Thermometer, Max/Min
With 2 of Internal Sensor & 1m External Cable / NTC-Probe, −50℃~+300℃, 0.1/1.0℃ Divi., 태양광 충전 온도계

Module/Handy Digital Thermometer

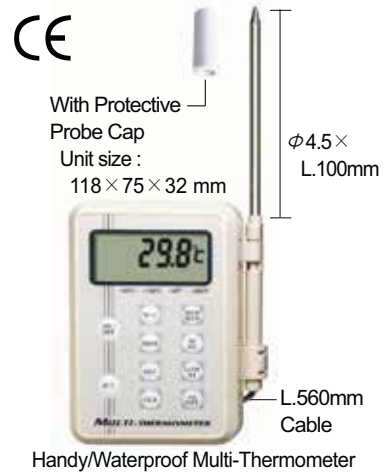
■ ***Unique Design of Using Solar Energy***

* 1m Wire with Stainless-steel Probe.
* 1 Second Normal Temperature Sensing Time.
* Strong Magnet for Easy Attachment.
* CE Approval.

Specifications & Ordering information

Spec. \ Model	A1.T9277B
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for -19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temp. / Weight(g) / Color	0℃ ~ +50℃ or +32°F ~ +122°F / 70g / Green
Battery / Package	1×1.5Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type	External Sharp NTC-Probe : od.Φ3.2×L46mm with 1m Cable
Dimension	103×43×16 mm (LCD Size : 41×15 mm)
Cat. No. & Price ₩	**A1.T9277B** Ea

DAIHAN® Handy / Waterproof Multi-Thermometer, with L560mm Cable & NTC-Probe
With 10 Memories Data Storage / Recalling / Clearing, −50℃~+300℃, 0.1/1.0℃ Divi., 다용도 방수 온도계(온도센서 & 케이블)



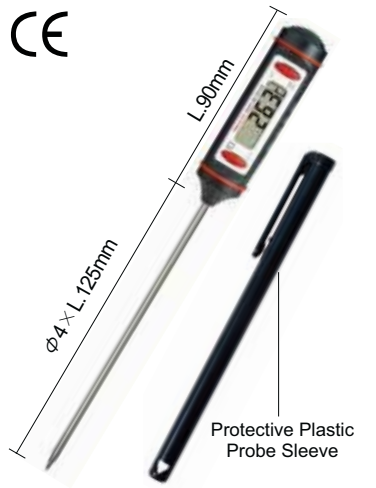
Handy/Waterproof Multi-Thermometer "A1.T9235"

* 4.5mm Diameter of Stainless-steel Probe which Good for Solid Measurement.
* Alarm Beeps when Temperature Reaches/Beyond the Pre-Set Limit.
* Flip Out Stand.
* Compartment for Cable Storage.
* 1 Second Normal Temperature Sensing Time.
* Optional One Hour Auto Shut Off.
* Comprehensive Functions.
* CE Approval.

Specifications & Ordering information

Spec. \ Model	A1.T9235
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color / Waterproof	120 / Ivory White, Splashproof
Battery / Package	1×1.5Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC-Probe : od.Φ4.5×L100mm (with L560mm Cable)
Dimension	118×75×32 mm (LCD Size : 49×22 mm)
Cat. No. & Price ₩	**A1.T9235** Ea

DAIHAN® Pocket / Clip Digital Thermometer, Pen-Shape, L.125mm NTC-Probe Type
With Protective Plastic Sleeve/Pocket Clip, −50℃~+300℃, 0.1/1.0℃ Divi., 포켓형 디지털 온도계(포켓 클립형)



Pocket/Clip Digital Thermometer "A1.T9307"

* 4mm Diameter of Stainless-steel Probe which Good for Solid Measurement.
* Instant and Precision Temperature Display.
* 1 Second Normal Temperature Sensing Time.
* Large LCD Display with Digit Height 10mm.
* CE Approval.
* Pen–Shaped Design

Specifications & Ordering information

Spec. \ Model	A1.T9307
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	35 / Black
Battery / Package	1×1.5 Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC-Probe : od.Φ4×L125mm
Dimension	215×27×27 mm (LCD Size : 35×11 mm)
Cat. No. & Price ₩	**A1.T9307** Ea

DAIHAN® Metal Housing Waterproof (IP67) Thermometer, with Z-Clip & Protective Plastic Sleeve
Ideal for Kitchen or Lab, Max/Min, with NTC-Probe, −50℃~+150℃, 포켓형 디지털 방수 온도계(조절 가능 Z클립)

Metal Housing Waterproof(IP67) Thermometer

* Unique Design of Metal Pulling Housing
* 2 Points Block Design to Prevent Product Rolling
* Main Unit Heat Resistance to 80℃
* Waterproof IP67 Rated
* Dishwasher Safe
* You can adjust the spacing of Z-Clip

Specifications & Ordering information

Spec. \ Model	A1.ST9341C
Measurement Range	−50℃ ~ +150℃ or −58°F ~ +302°F
Resolution	0.1°
Accuracy	±1℃
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	30(g) / Silver
Battery	1×1.5 Volts "393" Size or Equivalent
Sensor Type	NTC-Probe : od.Φ4×L 122mm
Dimension	146×37×37 mm (LCD Size : 24×12 mm)
Cat. No. & Price ₩	**A1.ST9341C** Ea

DAIHAN® Waterproof / Pocket Digital Thermometer, Max/Min, Extension Handle, with NTC-Probe
With Protective Sleeve/Pocket Clip, −50℃~+300℃, 0.1/1.0℃ Divi., 포켓형 디지털 방수 온도계(손잡이 가변형)

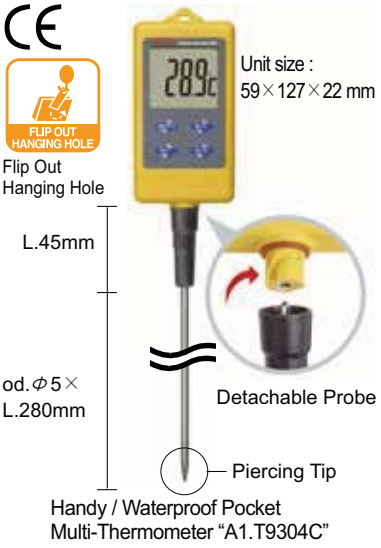
Waterproof / Pocket Digital Thermometer

* Pen-Shaped Design.
* Waterproof : IP 67.
* Convenient Use of Hanger.
* Ingenious Design of Using Probe Sleeve Vent Hole as a Holder
* Connecting Probe Sleeve to Head of Unit as a Handle Extension.
* CE Approval.
* Press Button Membrane Keypad Function and Display.
* 1 Second Normal Temperature Sensing Time.

Specifications & Ordering information

Spec. \ Model	A1.T9231C
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for -19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color	40 / Black
Battery / Package	1×1.5 Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC-Probe : od.Φ4×L115mm
Waterproof	IP 67
Dimension	206×13×19 mm (LCD Size : 25×8 mm)
Cat. No. & Price ₩	**A1.T9231C** Ea

DAIHAN® Handy / Waterproof Multi-Thermometer, with Rubber Coated-Housing/-Hanger
With Detachable Φ5×L280mm Long NTC-Probe, −50℃~+300℃, 0.1/1.0℃ Division, 다용도 방수 온도계(분리형 온도센서)



* Unique Design of Probe Changeable Unit.
* 1 Second Normal Temperature Sensing Time.
* Supplied with Longer and Broader (280mm×Φ5mm) Probe Together.
* Waterproof Function : IP 67.
* Rubber Coated Housing and Hanger.
* Flexible for Multi Usage.
* CE Approval.

Specifications & Ordering information

Spec. \ Model	A1.T9304C
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of -30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color / Waterproof	275 / Grey・Yellow, IP 67
Battery / Package	1×1.5Volts "A76" Size (LR44, g13) or Equivalent / White Box
Sensor Type	NTC-Probe : od.Φ6×L275mm(with Connection 325mm)
Dimension	59×127×22 mm (LCD Size : 39×35 mm)
Cat. No. & Price ₩	**A1.T9304C** **Ea**

DAIHAN® Waterproof / Handy Multi-Thermometer, with Adjustable Hanger & NTC-Probe, −50℃~+300℃
With Jumbo LCD, Max/Min, High- / Low-Alarm, Jumbo LCD, 0.1/1.0℃ Divi., 포켓형 디지털 방수 온도계(조절 가능 행거)

* Designed for Comprehensive of Use.
* Rubber Coated Adjustable Hanger.
* Press Button Membrane Keypad Function and Display.
* Alarm Beeps when Temperature Reaches/ Beyond the Pre-Set Unit.
* 1 Second Normal Temp. Sensing Time.
* Jumbo LCD Display with Digit Height 18mm.

Specifications & Ordering information

Spec. \ Model	A1.T9314C
Measurement Range	−50℃ ~ +300℃ or -58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Battery / Package / Waterproof	1×1.5V "A67" Size(LR44, G13) or Equivalent / Sliding Blister with Print Card, IP 67
Sensor Type	NTC-Probe : od.Φ4×L115mm
Dimension & Weight	210×53×18 mm (LCD Size : 32×30 mm) , 70g
Cat. No. & Price ₩	**A1.T9314C** **Ea**

DAIHAN® Waterproof/Handy Corkscrew Heavy-Duty Thermometer, for Frozen Food & Solid
With Φ8mm Corkscrew NTC-Probe, Protective Sleeve, −50℃~+300℃, 0.1/1.0℃ Divi., 나사형 방수 온도계

* Rugged Heavy Duty Design.
* Corkscrew Probe with 8mm Diameter.
* 1 Second Normal Temperature Sensing Time.
* CE Approval.
* Protective Plastic Probe Sleeve with Pocket Clip
* Waterproof : IP 67.

Specifications & Ordering information

Spec. \ Model	A1.T9311C
Measurement Range	−50℃ ~ +300℃ or −58°F ~ +572°F
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°
Accuracy	±1.0℃ or ±1.8°F In the Range of −30℃ ~ +250℃ or −22°F ~ +482°F, Otherwise more than ±2.0℃ or ±4°F
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F
Weight (g) / Color / Waterproof	75 / Ivory White, IP 67
Battery / Package	1×1.5Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type	NTC-Probe : od.Φ8×L100mm
Dimension	161×100×30 mm (LCD Size : 35×11 mm)
Cat. No. & Price ₩	**A1.T9311C** **Ea**

Alla® Folding Oven Thermometer, with 1m Stainless Cable & NTC-Probe, Timer/Alarm/Clock, up to 300℃/572°F
With 1m Stainless Cable & Probe, "Cable-Stay- in Oven", 1° - display, "23Hr-59Min-59Sec" Timer, **접이식 오븐 온도계**

Probe L150×Φ4mm
& Cable L100cm

90° Screen Folding

■ Supplied by Alla® in France

* Useable Thermometer Acts as Great Helper in Kitchen.
* Monitoring of Internal Temperature by Probe
* Comprehensive Multi-Functional Device for Temperature and Alarm Checking.
* With Waterproof Probe (IP 67) and Supplied with 1m Stainless-steel Cable
* Battery & Protective Plastic Probe Cap Included
* Magnet at the Back for Easy Attachment
* Maximum Count : 23 : 59 : 59 (Hr : Min : Sec.)
* In Blister Packaging

Function : On/Off, ℃/°F, Timer, Clock, Alarm, High/Low Alarm

Specifications & Ordering information

Spec. \ Model	AL.91000.003F
Measurement Range	0 ~ +300℃(1°) / +32 ~ +572°F
Resolution	1°
Accuracy	±1℃/ 1.8°F between 0+150℃/ 32+302°F ±3℃/ 5.4°F between 150+300℃/ 302+572°F
Battery	2×1.5 Volts "AAA" Size
Dimension (mm)	Folding Screen : 125×70×10mm (LCD Size : 50×35mm) Probe & Cable : 150mm×Φ4mm Probe & 100cm Cable
Cat. No. & Price ₩	AL.91000.003F Ea

DAIHAN® Jumbo 2-row display Indoor / Outdoor Digital Thermometer, with NTC-Probe & 3m Cable, Max / Min
With Flip Out Stand / Hanging Hole / Magnet for Attachment, −50℃~+70℃, 0.1℃ Divi., **실내/외용 디지털 온도계(2열 표시)**

Jumbo 2-row Display Digital Thermometer

* Ideal for Office, Home, Laboratory, etc.
* Dual Row Display for Easy Reading.
* Indoor/Outdoor Temperature Display.
* Pocket Size with Large LCD Display.
* Flip Out Stand, Hanging Hole and Strong Magnet at the Back for Easy Attachment.
* 3 Meters Sensor Wire with Probe for Outdoor Temperature Measurement.
* CE Approval.

Specifications & Ordering information

Spec. \ Model	A1.T9239	A1.T9267D
LCD Size	LCD Size : 30×40 mm	
Measurement Range	−50℃ ~ +70℃ or −58°F ~ +158°F	
Resolution	0.1 for Whole Range	
Accuracy	±1.0℃ or ±1.8°F In the Range of −20℃~+70℃ or −4°F ~+158°F Otherwise more than ±1.0℃ or ±1.8°F	
Ambient Temperature	0℃ ~ +50℃ or +32°F ~ +122°F	
Weight (g) / Color	70(g) / White	82(g) / White
Battery	1×1.5 Volts "A76" Size (LR44, G13) or Equivalent	
Dimension	70×70×17 mm	67×65×22 mm
Cat. No. & Price ₩	A1.T9239 Ea	A1.T9267D Ea

DAIHAN® LCD Temperature Datalogger, 62000 Sets of Data
With USB Cable, −20℃~+70℃, **데이터 로거**

* Instant current temperature read-out
* Completed with hidden buttons to avoid unexpected operation
* Hanging hole and magnet for easy mounting
* Works on Windows XP / Vista / 7 or above
* It is connected to the computer via USB cable(Software will be sent by email)

Specifications & Ordering information

Spec. \ Model	A1.DL104
Measurement Range	−20℃ ~ +70℃ or −4°F~+158°F or +253℃ ~ +343℃
Resolution & Accuracy	0.1°, Accu.±1℃
Mode of recording	One-time, Endless Loop (overwriting), End At
Data Capa. and Waterproof	62000 sets of data, and IP×5
Ambient Temp.	−20℃ ~ +70°C or −4°F ~ +158°F
Battery	1×3 volts "CR2032" size or equivalent×2
Log interval	1/2/5/10/15/30 seconds 1/2/5/10/15/30/60/90/120 minutes
Dimension	41×60×23 mm (LCD Size : 28×18 mm)
Cat. No. & Price ₩	A1.DL104 Ea

Articles	Cat. No	Description

DAIHAN® HACCP Precise Pt-100 Thermometer with Timer, Max / Min / Evg. −100℃~+300℃

Ideal for Foodstuff, with IP 67 Waterproof, 99Points Data Record, Alarm & Temp-Programmable, 0.01℃/℉, 정밀 백금 센서 온도계

* Rigid Housing Design and the Most Accurate Pt100 Probe
* Complete Set IP67 Waterproof and Washable in Washing Machine
* Green/Red Dual Color Backlight to Indicate Temp. Hazards
* Temp. High Alarm Threshold Programmable
* ℃/℉ Switchable
* Max./Min./Avg. Reading Display
* Hold Function to Freeze Current Reading
* Countdown Timer Function Included

Spec. \ Model	DH.The5
Measure Range	−100 ~ 300℃
Resolution	0.01℃ / 0.01℉
Accuracy	±0.15℃
Temp. Response Time	3 mins
RTD Probe Size (mm)	Length - 150mm Diameter - 3.2mm Handle Length - 100mm, Cable Length - 1100mm
Battery	6×AAA Battery
Dimension / Weight(g)	169×78.3×h34.4 mm (LCD Size : 54×32.5 mm) / 200g
Standard Package	Meter / RTD Probe / Stainless Holder / Battery / Manual
Cat. No. & Price ₩	DH.The3005 Set

DAIHAN® Heat Stroke Prevention WBGT Monitor, Temp / RH% / WBGT / Alarm 65dB

Desktop / Wallmount, Programmable Danger Zone, 0~50℃, 20~90% RH, WBGT 0~60℃, WBGT 모니터

W.B.G.T Monitor

* Wet Bulb Globe Temperature Monitor
* Checks Dangerous Heat Conditions through WBGT
* Temperature Unit ℃ / ℉ is Switchable
* Max/Min Function to Review Data
* Simultaneously Displays Temperature and Humidity
* Programmable Danger Zone for Warning Purpose
* Audible Beeper and Bright Red LED for Danger Zone Warning
* Real Time Display (Hour & Minute, AM/PM)
* Battery Low indicator

Spec. \ Model	DH.The3
3×Measuring Range	(1) Temp.: 0 ~ 50℃ (Display : −10 ~ 70℃), (2) Humidity : 20 ~ 90%RH (Display : 0 ~ 99.9%RH), (3) WBGT : 0 ~ 60℃
2×Accuracy	(1) Temp.: ±1℃ (2) Humidity : ±5%RH (at 25℃, 10 ~ 90%RH, others ±7%RH)
2×Resolution	(1) Temp.: 0.1℃/0.1℉, (2) Humidity : 0.1%RH
Temp. Response Time	120 Seconds Typical
Battery	3×AA Battery
Dimension / Weight(g)	110×91×h30mm(LCD Size : 63×70 mm) / ~200g
Standard Package	Meter / Battery / Manual / Paper Box
Cat. No. & Price ₩	DH.The3003 Set

DAIHAN® Specialty Thermometer, Digital Spoon Thermometer & Digital Floating Pool Thermometer, 특수 온도계

(1) Digital Spoon Thermometer

■ ***CE Approval*** ■ ***Sensor Type : NTC*** ■ ***1 Second Normal Temperature Sensing Time.***

(1) Digital Spoon Thermometer, for Baby/Health-Care, −50℃~+110℃, 0.1/1.0℃ Division

* Patented
* Made of ABS Plastic
* Complies with FDA(US)
* Ideal for Temp. Measurement of Small amount of Liquid
* Streamline Design with Spoon Handle

(2) Digital Floating Pool Thermometer, Waterproof IP67, 0℃~+50℃, 0.1℃ Division

* Floating On Water
* Supplied with 3m Nylon Cord with Magnetic Switch to Activate the Unit
* Ideal for Pool, Water tank, Aquarium
* Top Scale Reading without Hand Wetting

(2) Digital Floating Pool Thermometer

Spec. \ Model	(1) Digital Spoon Thermometer	(2) Digital Floating Pool Thermometer
Measurement Range	−50℃ ~ +110℃ or −58℉ ~ +230℉	0℃ ~ +50℃ or +32℉ ~ +122℉
Resolution	0.1° for −19.9° ~ +199.9°, Otherwise 1°	0.1° for Whole Range
Accuracy	±1.0℃ or ±1.8℉ In the Range of 30℃ ~ +110℃ or −22℉ ~ +230℉, Otherwise more than ±2.0℃ or ±4℉	±1.0℃ or ±1.8℉ for Whole Range
Ambient Temperature	0℃ ~ +50℃ or +32℉ ~ +122℉	0℃ ~ +50℃ or +32℉ ~ +122℉
Weight (g) / Color	25g / Yellow or Pink, NTC	45g / Light Blue
Battery	1×1.5Volts "A76" Size (LR44, G13) or Equivalent	1×1.5Volts "AAA" Size or Equivalent
Dimension	175×22×13mm (LCD Size : 26×8 mm)	235×142×142mm (LCD Size : 71×29 mm)
Cat. No. & Price ₩	A1.T9220Y ; Yellow Ea A1.T9220P ; Pink Ea	A1.T9257 Ea

Articles	Cat. No	Description

Wisd Professional Melting Point Analyzer "MP360D", Up to +300℃ ±0.5℃, Two Heating Speeds

Simultaneous Measurement of 2 Samples, Internal Cooling Fan, 융점 측정기, 2 샘플 동시측정, 급속 냉각

Professional Melting Point Analyzer

- ***DAIHAN Designed***
- ***PL(Product Liability) Insurance***
- ***Excellent for the most General Lab Sample Melting Point Applications***
- ***Simultaneous Measurement of Two Samples***
- ***Broader and Clear View with : the Internal LED Light, the Magnified Lens, the Second Internal Display, the Second Internal Display, and the Inclination given by the Hind Legs***
- ***Internal Fan for Rapid Cooling after Measurement***
- ***External Manual Control for Easy and Immediate Hold Function***
- ***Included Capillary Tubes, Close Type, L100mm, 100pcs***

∗ The Heated Rate is Divided into 2 Speeds to Reduce the Viewing Time :
- The Fast Stage is Set at 10℃ below the Known Melting Point of the Sample.
- The Temp. is kept at the Fast Stage Point and Beeping for the Next Stage.

∗ Ambient Temperature : 5.0 ~ 40℃
∗ Hand Held "READ" Push Button to Quick Response
∗ Data Recording System : 32 Sets of Data
∗ Forced Cooling Reduces Analysis Time.
∗ Inside Block Temperature View
∗ External Printer(Option) Automatically Print Sample ID, Date and Melting Point.
∗ External Calibration

Specifications & Ordering information

Spec. \ Model	"MP360D"
Temp. Range & Accuracy	Ambient to 300℃, ±0.5℃
Temp. Resolution	0.1℃
Fast Stage Ramp Rate	20℃/min Fixed
Slow Ramp Rate	0.2~10℃/min Adjustable, 0.1℃/min Interval
Cooling Rate	25℃/min
Number of Samples	2
Display	4 Digit with 8 Segments
Heating Power Consumption	75W
Dimensions(w×d×h) & Net Weight	160×220×170mm, 1.8kg
Electrical Reqts.	1 Phase, AC 230V, 50 / 60Hz
Cat. No.	DH.Mel7011
Price, Each. ₩	

Witeg® Melting Point Capillary Tube, Glass, 융점 측정 모세관

- ***Supplied by Witeg® in Germany***

∗ Excellent for Melting Point Determinations. Length 80 mm, Outside diameter 2.5 mm Packed 100 pcs.
∗ Use a Powdered Sample ∗ Automatic or Manual Measurement
∗ 100 pcs/vial pack

		Pk.	Price, ₩
WI.2700000	Melting Point Tube, od 2.5 mm×L80 mm, Both Ends Open	100ea	
WI.2702000	, One End Closed	100ea	

DAIHAN® Programmable Ball Mill, "BML", 2-/6- Pots, with Certi. & Traceability

With Digital Feedback Control System, Digital LCD, 50~600 rpm, ±5 rpm, 10 Steps 6 Programs

디지털/프로그램식 볼밀/자밀, 2구 & 6구용, 정밀형, 속도조절식

(1) 2-Places Programmable Ball Mill "BML-2"

(2) 6-Places Programmable Ball Mill "BML-6"

Optional Soundproof Cabinet "BMC-6"
for 6-Places Programmable Ball Mill "BML-6"

- ***Made in Korea*** ***CE Certified*** ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Grinding / Mixing : Crystalline Chemicals, Inks, Paints, Pigments, Plants, Racks and Soils***
- ***Microprocessor, Programmable, Variable Speed : 50~600 rpm***
- ***Digital Feedback Control and LCD : Speed (RPM), Power Bar-Graph and Timer Status***

∗ Antistatic Rubber Roller : Keeps Jars / Pots Centered
∗ Digital LCD with Back-Light Function
∗ Over Load Protection ∗ Ergonomic and Compact Design
∗ NBR Roller with Pot Guide Ring
∗ Programmable Operation : 10 Steps 6 Programs
∗ Storage Function (RPM, Timer)
∗ Soundproof Cabinet for Safety and Minimum Noise (Optional)

Specifications & Ordering information

Spec. \ Model		(1) "BML-2" Max. 2 Pots	(2) "BML-6" Max. 6 Pots
Capacity		2-places, up to 2 pots	6-places, up to 6 pots
Motor		DC 40W Geared Motor (5 : 1 ratio)	DC 100W Geared Motor (5 : 1 ratio)
Maximum Load		30 kg	60 kg
Speed Range		50 ~ 600 rpm	
Speed Accuracy		±5 rpm	
Timer		99 hr 59 min (Programmable)	
Display		Digital LCD with Back-Light Function	
Controller		Programmable Digital Feedback Controller with Jog-Shuttle Switch (Turn+Push)	
Program Function		10 Steps, 6 Programs	
Safety Device		Over Load Protector for Motor	
Dimension (w×d×h)	Roller (mm)	50×300	70×800
	External (mm)	620×300×515	1,200×500×795
Packing Size (w×d×h) (mm) & Gross Weight		760×460×700	1,300×620×1,010
		52 kg	115 kg
Power Consumption		40 W	100 W
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WBM05002	DH.WBM05006
	120V	DH.WBM05102	DH.WBM05106
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 20,000 별도!

Optional Soundproof Cabinet

∗ **Designed for Minimizing Noise, and Safety Work**

Ea. Price, ₩

DH.WBM505102 Soundproof Cabinet, **"BMC2"**, for **2-places"BML-2"**, w1,020×d570×h1,120mm

DH.WBM505106 Soundproof Cabinet, **"BMC6"**, for **6-places"BML-6"**, w1,600×d770×h1,400mm

Wisd® Cutting Mill & Pin Mill Common Use "Cml140" & "Pml140", Dry type, Max 4600rpm, Output<0.4~1.3mm With Stainless-steel Body, Powerful 1Phase 3HP Motor, Maximum load 5Kg, Input<10mm, 실험실용 커팅밀 & 핀밀 겸용

Pin Mill, "Pml140"

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance*** ■ ***Low Noise***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Chemicals, Pharmaceuticals, Synthetic Resins, Metals, Ceramics, Mining, etc.***
- ***Extensive Crushing from Granular to Fine Grinding***
- ***Included 0.5mm Screen Sieve for Output Material***
- ***Excellent Quality of Output Material due to Low Heat Generated***

∗ High Strength and Hardness : SUS304 Body/Feeder/Rotor, SUS430 Screen, SS400 Base Frame
∗ The Raw Material is Diffused together with the Airflow by Rotation, and Crushed by the Impact of the Rotating Plate and the Fixed Plate.
∗ Adjust the Desired Grinding Particle Size by Replacing the Internal Screen.
∗ Pulverizing Various Raw Materials by Replacing the Grinding Disk
∗ Easy to Separate and Assemble ∗ Easy to Clean and Maintain ∗ Simple Interface
∗ Include : 4 Screen Sieve, 2 Screen Frame, 2 Filtered collection hopper

(1) Grinding Disk Rotor

(2) Grinding Disk Stator

(3) Grinding Disk Knife

(4) Screen Sieve

Specifications & Ordering information

Spec. \ Model		"Cml140" Cutting Mill	"Pml140" Pin Mill
Grinding Disc		Knife type Rotor 8ea×Cutting Knife	Pin type Rotor & Stator 10ea×Rotator Pin, 17ea× Stator Pin
Capacity		5kg(3~10kg/h)	
Hopper Size(w×d×h) / Input Raw Material		120×120×200 / <10mm	
Screen / Output material Dia.	Include	4ea×140 / <0.5mm	
	Option	4ea×60, 80, 100, 180 / <1.3, 0.8, 0.6, 0.4mm	
Speed & Motor	Feeder	25RPM, 40W, DC MOTER	
	Mill & Cutting	4600RPM, 1Phase 3HP	
Body Dia.		Φ165mm	
Dimension & Weight		450×550×h1150, Net. 85kg / Gross. 90kg	
Power Consumption		2.2kW	
Electrical Reqts.		1 Phase, 230V 60Hz	
Cat. No.		DH.Cml7010	DH.Pml7010
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 55,000 별도!

Spare Accessory for Standard Chamber

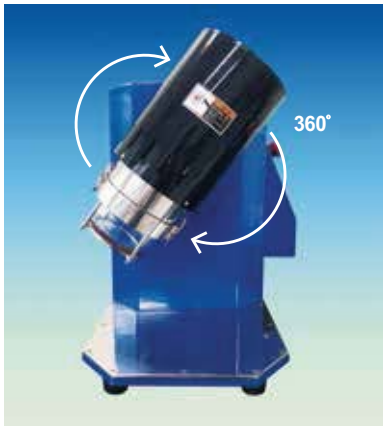
		Ea. Price, ₩
DH.PmlR1011	(1) Grinding Disk Rotor, Stainless-steel, **"R1011"**, for **"Pml140"**	
DH.PmlS1012	(2) Grinding Disk Stator, Stainless-steel, **"S1012"**, for **"Pml140"**	
DH.CmlK1011	(3) Grinding Disk Knife , Stainless-steel, **"K1011"**, for **"Cml140"**	
DH.PmlS1018	(4) Screen Sieve 180 , Stainless-steel, Output Material Dia.<Φ0.5mm, **"S1018"**, for **"Pml140"**, **"Cml140"**	

Optional Accessory

		Ea. Price, ₩
DH.PmlS1015	(4) Screen Sieve 60, Stainless-steel, Output Material Dia.<Φ1.3mm, **"S1015"**, for **"Pml140"**, **"Cml140"**	
DH.PmlS1016	(4) Screen Sieve 80, Stainless-steel, Output Material Dia.<Φ0.8mm, **"S1016"**, for **"Pml140"**, **"Cml140"**	
DH.PmlS1017	(4) Screen Sieve 100, Stainless-steel, Output Material Dia.<Φ0.6mm, **"S1017"**, for **"Pml140"**, **"Cml140"**	
DH.PmlS1019	(4) Screen Sieve 180, Stainless-steel, Output Material Dia.<Φ0.4mm, **"S1019"**, for **"Pml140"**, **"Cml140"**	

*Wisd*ᵒᵐ Rotated Powder Mill Mixer "Rml300", Dry-type, 300cc, Max 14,000 rpm

With Automatic Rotating Chamber(15rpm), Stainless-steel Body & SUS440c Blade, PTFE Packing, **회전형 밀 믹서**



Rotated Powder Mill Mixer "Rml300"

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Laboratory, Pharmaceutical, Chemical, Agriculture, Metal Ribbon, etc.***
- ***Wide Range of Materials Including Rocks, Bone, Ceramic, Glass, Grain, Seed, etc.***
- ***Closed, Dust Tight Crushing & Cutting Sanitary Stainless-steel Chamber(SUS304)***
- ***Included SUS440c Knife Impeller, High strength and hardness Blade***

∗ Automatic Rotating Chamber (Max.15rpm) Provides Efficient Grinding :
While the Knife is Rotating(Max.14,000rpm), the Rotation of the Chamber itself Moves the Inner Sample up, down, left, and right to Maximize the Mixing Dispersion.
∗ Digital Feedback Control : Steady and Constant Rotating
∗ Digital LCD with Back-Light Function
∗ Safety Sensor to Check Lid Open
∗ Quick and Easy to Clean

(1) Standard Blade
Φ55mm

(2) Standard Blade
Φ100mm

(3) Round Blade
Φ70mm

(4) Propeller Blade
Φ80mm

Specifications & Ordering information

Spec. \ Model		"Rml300"
Capacity / Maximum Load		300cc, Φ106×h66 / 1.5kg
Motor		AC High Frequency Motor(300Hz)
Speed Range	**Blade**	3000~14000rpm
	Chamber	Max.15rpm
Time		Max. 3min (Repeat 99, after 30sec)
Display		4″ Digital LCD with Back-Light Function
Controller		PLC-Inverter Controller
Program Function		10 Recipe Memory
Safety Device		Safety Sensor for Lid Open
Dimensions	**Body(mm)**	w390×d520×h480
	Chamber(mm)	Φ163×h72
Weight		Net. 60kg Gross 65kg
Power Consumption		400W
Electrical Reqts.		AC 230V, 60Hz
Cat. No.		**DH.Rml7011**
Price, Each. ₩		

※ 운임 약 ₩ 55,000 별도!

Spare Accessory Blade

		Ea.	Price, ₩
DH.RmlB1010	(1) Standard Blade, 2-bladed, #440, Φ55mm, "B1010"		
DH.RmlB1011	(2) , Φ100mm, "B1011"		

Optional Accessory

		Ea.	Price, ₩
DH.RmlB1015	(3) Round Blade, #440, Φ70mm, "B1015"		
DH.RmlB1016	(4) Propeller Blade, 4-bladed, #304, Φ80mm, "B1016"		

DAIHAN Scientific

Oven

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

General Purpose, Forced-air ····· P. 166~167
, Forced-air, SMART ····· P. 168~169
, Gravity-air ····· P. 170~171
, Gravity-air, SMART ····· P. 172~173
High Clean Air ····· P. 174
Industrial/Large-capacity ····· P. 175
Vacuum, General-type ····· P. 176
, SMART-type ····· P. 177
Vacuum Pump ····· P. 178~179

Forced-air Oven
"ThermoStable™ OF-105"

Gravity-air Oven
"ThermoStable™ SON-105"

Hi-clean Air Oven
"ThermoStable™ WOC-560"

Industrial Oven
"ThermoStable™ WOF-L1000"

Vacuum Oven
"ThermoStable™ SOV-70"

WiRe™ App Service

Controlled by Smart-Phone

DAIHAN® Forced-air Oven "ThermoStable™ OF", 3-Side Heating Zone, 50 · 105 · 155 · 305 Lit, up to 250℃, ±0.3℃

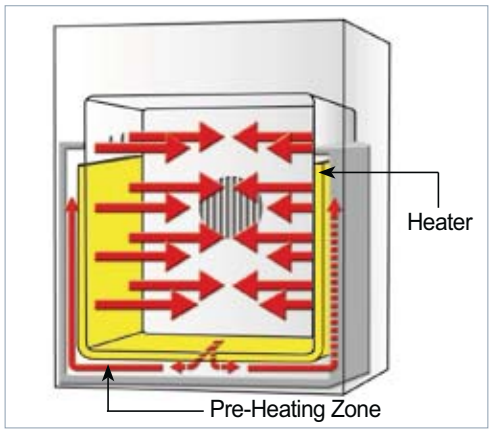
With Wire Shelves/Digital PID Control/Jog-Dial & Push Button/Digital LCD/Back-light LCD/Pre-Heating Zone/Certi. & Traceability

강제 순환식 정밀 건조기/오븐, 고정밀 디지털 퍼지 제어, 우수한 온도 정확성/균일성

(1) Standard Model, Forced-air Oven

- ■ *Made in Korea* ■ *CE / UL / CUL Certified(Exclude 305Lit-model)*
- ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*
- ■ *3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism*
- ■ *Digital PID Control System Implementing Superior Temperature Accuracy*
- ■ *Optimized Air Flow by Forced-air Mechanism* ■ *GD(Good Design)-mark*
- ■ *Patented Jog-Dial Control System* ■ *PL (Prod uct Liability) Insurance*

* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
* The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism: 3-Side Heating
* New Jog-Dial with Push Button
* Compact New Body Design
* 2~3ea of Stainless-steel Wire Shelf Included
* Alarm Function : Error status and Timer-end
* RS232C Interface for Monitoring and Controlling with PC
* Ambient +5℃ to 250℃ Range with Fluctuation of ±0.3℃ at 100℃
* Storage Function of Temperature and Timer setting values
* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)
* Corrosion Resistant 304 Stainless-steel Chamber
* Over Temperature & Over Current Protection, Sensor Error Detection



3-Side Heating Zone Forced-air Mechanism :
The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
(Exclude OF-305, OF-W305)

Perfect Door Lock by Double Latch

Specification

Spec. \ Model		(1) Standard Model			
		ThermoStable OF-50 Max. Capa. 50L	ThermoStable OF-105 Max. Capa. 105L	ThermoStable OF-155 Max. Capa. 155L	ThermoStable OF-305 Max. Capa. 305L
			(2) Standard-Window Model		
			ThermoStable OF-W105	ThermoStable OF-W155	ThermoStable OF-W305
Capacity		50 Lit	105 Lit	155 Lit	305 Lit
Dimension (w×d×h)	Interior (mm)	370×345×420	485×415×535	550×480×600	550×470×1,180
	Exterior (mm)	518×647×724	653×712×882	718×777×947	721×777×1,619
Heater Power		650 W	1.4 kW	1.6 kW	3.4 kW
Temp.	Range	Room Temp +5℃ to 250℃			
	Fluctuation	±0.3℃ at 100℃, ±0.5℃ at 150℃			
	Variation	±1℃ at 100℃, ±1.8℃ at 150℃		±1℃ at 100℃, ±2℃ at 150℃	
	Sensor	PT 100			
Control Resolution		±0.1℃			
Heat-up Time		25 min. to 100℃, 45 min. to 150℃		25 min. to 100℃, 40 min. to 150℃	
Recovery Time (Door open 30sec)		8 min. to 100℃, 8 min. to 150℃	6 min. to 100℃, 6 min. to 150℃		
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button			
RS232 Port		Available to connect with PC			
Display		Digital LCD with Back Light			
Timer		99hr 59 min (delay/continuous function)			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)		2ea Wire Shelf			3ea Wire Shelf
		Load per Stainless-steel Wire Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea	2ea		3ea
Circulation		Forced-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Others		UL/CUL Certified, CE Certified, GD-mark, Storage Function (Temp. and Time) Locking Mode (Jog-Dial Input Disabled), Alarm (Error Status and Timer-end)			
Net Weight (kg)		44	69	78	159
Packing Size (w×d×h)(mm)		622×754×807	743×819×1,068	808×884×1,133	1,000×1,000×1,870
Shipping Weight (kg)		59	79	92	219
Power Consumption		674 W	1390 W	1566 W	3200 W
Energy Consumption, at 100℃		117 Wh	187 Wh	204 Wh	-
, at 150℃		230 Wh	337 Wh	398 Wh	-
Electric Reqts.		120V, 60Hz or 230V, 50/60Hz			

* Other Specifications are available upon Customer's Request.

<Continued On Next Page>

<*Continued From...*DAIHAN® Forced-air Oven "ThermoStable™ OF">

Ordering Information

※ 운임 약 ₩ 25,000 별도!

(1) Standard Model, Forced-air, with Wire Shelf

		Ea. Price, ₩
DH.WOF05050	Oven, Standard, **230V, 50 Lit, "ThermoStable OF-50"**	
DH.WOF05105	**, 105 Lit, "ThermoStable OF-105"**	
DH.WOF05155	**, 155 Lit, "ThermoStable OF-155"**	
DH.WOF05305	**, 305 Lit, "ThermoStable OF-305"**	
DH.WOF06050	Oven, Standard, **120V, 50 Lit, "ThermoStable OF-50"**	
DH.WOF06105	**, 105 Lit, "ThermoStable OF-105"**	
DH.WOF06155	**, 155 Lit, "ThermoStable OF-155"**	
DH.WOF06305	**, 305 Lit, "ThermoStable OF-305"**	

(2) Built in Viewing Window Model, Forced-air, with Wire Shelf

		Ea. Price, ₩
DH.WOF07105	Oven, Window, **230V, 105 Lit, "ThermoStable OF-W105"**	
DH.WOF07155	**, 155 Lit, "ThermoStable OF-W155"**	
DH.WOF07305	**, 305 Lit, "ThermoStable OF-W305"**	
DH.WOF08105	Oven, Window, **120V, 105 Lit, "ThermoStable OF-W105"**	
DH.WOF08155	**, 155 Lit, "ThermoStable OF-W155"**	
DH.WOF08305	**, 305 Lit, "ThermoStable OF-W305"**	

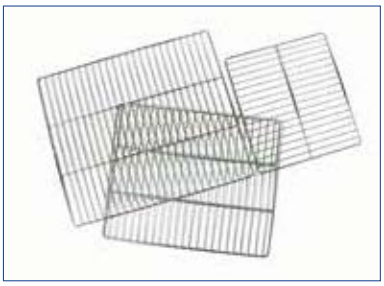
Spare Stainless-steel Wire Shelf

		Ea. Price, ₩
DH.WOF11050	Wire Shelf, for **50 Lit, "OFS050",** w340×d310mm	
DH.WOF11105	, for **105 Lit, "OFS105",** w455×d375mm	
DH.WOF11155	, for **155-/305-Lit, "OFS155",** w520×d440mm	

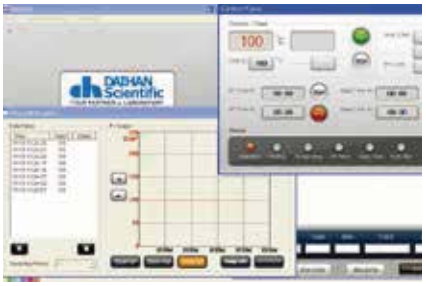
Forced-air Oven with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WOF31050	Validation Service(IQ, OQ), with "ThermoStable OF-50", **"OFV1050"**	
DH.WOF31105	Validation Service(IQ, OQ), with "ThermoStable OF-105", **"OFV1105"**	
DH.WOF31155	Validation Service(IQ, OQ), with "ThermoStable OF-155", **"OFV1155"**	
DH.WOF31305	Validation Service(IQ, OQ), with "ThermoStable OF-305", **"OFV1305"**	
DH.WOF32105	Validation Service(IQ, OQ), with "ThermoStable OF-W105", **"OFV2105"**	
DH.WOF32155	Validation Service(IQ, OQ), with "ThermoStable OF-W155", **"OFV2155"**	
DH.WOF32305	Validation Service(IQ, OQ), with "ThermoStable OF-W155", **"OFV2305"**	

(2) Standard-Window Model, Forced-air Oven



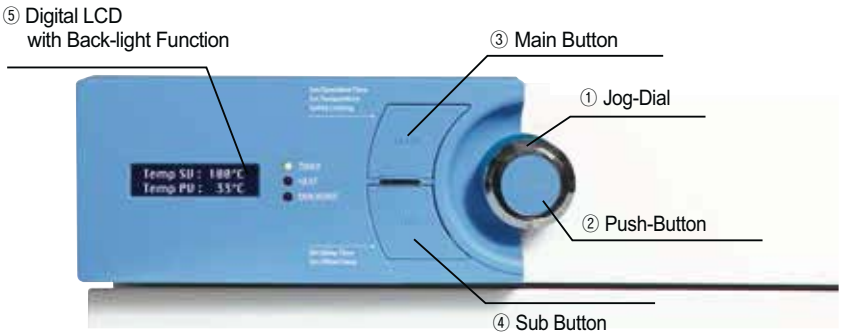
Stainless-steel Wire Shelf (Included)



WiseRemote Control Software :
Connection of Temperature Devices with Interface RS232C to a PC Export Recorded Data(Excel Spreadsheet)

* You can Download this Software at DAIHAN-Sci.com Shopping-mall

New Jog-Dial Controller



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

DAIHAN® SMART Forced-air Oven "ThermoStable™ SOF", 3-Side Heating Zone, 50 · 105 · 155 · 305 Lit

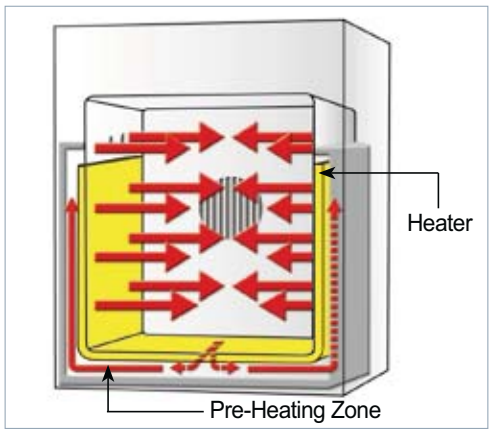
With Smart-Lab™ Controller, 4″ Full Touch Screen/Fuzzy-PID Control/WiRe™ Service/Certi. & Traceability, up to 250℃, ±0.3℃

스마트 강제 순환식 정밀 건조기/오븐, 우수한 온도 정확성/균일성, WiRe™서비스, 4인치 풀터치스크린 조절기

(1) Standard Model, "ThermoStable™ SOF-105"

- ■ ***Made in Korea*** ■ ***CE / UL / CUL Certified(Exclude 305 Lit-model)***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism***
- ■ ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ■ ***Smart-Lab™ Controller*** ■ ***Optimized Air Flow by Forced-air Mechanism***
- ■ ***GD(Good Design)-mark*** ■ ***PL(Product Liability) Insurance***

∗ Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
∗ The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism : 3 Side-Heating
∗ Ergonomic Design 4″ Full Touch Screen TFT LCD(Smart-Lab™ Controller)
∗ WiRe™ App Service. ∗ Automatic Data Recording
∗ Self-Diagnostic Function ∗ Compact New Body Design
∗ Variable Program Setting for Multiple Patterns with Multiple Segments
∗ Internet Connectivity with WiFi ∗ Controller SW can be upgraded through USB port.
∗ The Recorded Data could be transferred to PC by USB memory
∗ 2~3ea of Stainless-steel Wire Shelf Included
∗ RS232C Interface for Monitoring and Controlling with PC
∗ Ambient to 250℃ of Temp. Range, Fluctuation of ±0.3℃ at 100℃
∗ Corrosion Resistant 304 Stainless-steel Chamber
∗ Over Temperature & Over Current Protection, Sensor Error Detection



3-Side Heating Zone Forced-air Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Exclude SOF-305, SOF-W305)

Perfect Door Lock by Double Latch

<Continued On Next Page>

Specification

Spec. \ Model		(1) SMART Model			
		ThermoStable SOF-50 Max. Capa. 50L	ThermoStable SOF-105 Max. Capa. 105L	ThermoStable SOF-155 Max. Capa. 155L	ThermoStable SOF-305 Max. Capa. 305L
			(2) SMART-Window Model		
			ThermoStable SOF-W105	ThermoStable SOF-W155	ThermoStable SOF-W305
Capacity		50 Lit	105 Lit	155 Lit	305 Lit
Dimension (w×d×h)	Interior (mm)	370×345×420	485×415×535	550×480×600	550×470×1,180
	Exterior (mm)	518×647×724	653×712×882	718×777×947	721×777×1,619
Heater Power		650 W	1.4 kW	1.6 kW	3.4 kW
Temp.	Range	Room Temp +5℃ to 250℃			
	Fluctuation	±0.3℃ at 100℃, ±0.5℃ at 150℃			
	Variation	±1℃ at 100℃, ±1.8℃ at 150℃		±1℃ at 100℃, ±2℃ at 150℃	
	Sensor	PT 100			
Control Resolution		±0.1℃			
Heat-up Time		25 min. to 100℃, 45 min. to 150℃		25 min. to 100℃, 40 min. to 150℃	
Recovery Time (Door open 30sec)		8 min. to 100 ℃, 8 min. to 150℃	6 min. to 100 ℃, 6 min. to 150℃		
Controller		Smart-Lab™ Controller			
RS232 Port		Available to connect with PC			
Display		4″ Full Touch Screen TFT LCD			
Timer		99hr 59 min (delay/continuous function)			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)		2ea Wire Shelf			3ea Wire Shelf
		Load per Stainless-steel Wire Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea	2ea		3ea
Circulation		Forced-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function (Temp. and Time), Alarm (Error Status and Timer-end)			
Net Weight (kg)		44	69	78	159
Packing Size (w×d×h)(mm)		622×754×807	743×819×1,068	808×884×1,133	1,000×1,000×1,870
Shipping Weight (kg)		59	79	92	219
Power Consumption		674 W	1390 W	1566 W	3200 W
Energy Consumption, at 100℃		117 Wh	187 Wh	204 Wh	-
, at 150℃		230 Wh	337 Wh	398 Wh	-
Electric Reqts.		120V, 60Hz or 230V, 50/60Hz			

∗ Other Specifications are available upon Customer's Request.

<*Continued From...*DAIHAN® SMART Forced-air Oven "ThermoStable™ SOF">

Ordering Information

※ 운임 약 ₩ 25,000 별도!

(1) Standard Model, Forced-air, with Wire Shelf

		Ea. Price, ₩
DH.SWOF05050	Oven, Standard, **230V, 50 Lit, "ThermoStable SOF-50"**	
DH.SWOF05105	**, 105 Lit, "ThermoStable SOF-105"**	
DH.SWOF05155	**, 155 Lit, "ThermoStable SOF-155"**	
DH.SWOF05305	**, 305 Lit, "ThermoStable SOF-305"**	
DH.SWOF06050	Oven, Standard, **120V, 50 Lit, "ThermoStable SOF-50"**	
DH.SWOF06105	**, 105 Lit, "ThermoStable SOF-105"**	
DH.SWOF06155	**, 155 Lit, "ThermoStable SOF-155"**	
DH.SWOF06305	**, 305 Lit, "ThermoStable SOF-305"**	

(2) Built in Viewing Window Model, Forced-air, with Wire Shelf

		Ea. Price, ₩
DH.SWOF07105	Oven, Window, **230V, 105 Lit, "ThermoStable SOF-W105"**	
DH.SWOF07155	**, 155 Lit, "ThermoStable SOF-W155"**	
DH.SWOF07305	**, 305 Lit, "ThermoStable SOF-W305"**	
DH.SWOF08105	Oven, Window, **120V, 105 Lit, "ThermoStable SOF-W105"**	
DH.SWOF08155	**, 155 Lit, "ThermoStable SOF-W155"**	
DH.SWOF08305	**, 305 Lit, "ThermoStable SOF-W305"**	

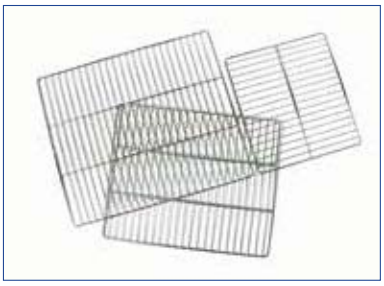
Spare Stainless-steel Wire Shelf

		Ea. Price, ₩
DH.WOF11050	Wire Shelf, for **50 Lit, "OFS050",** w340×d310mm	
DH.WOF11105	, for **105 Lit, "OFS105",** w455×d375mm	
DH.WOF11155	, for **155 / 305 Lit, "OFS155",** w520×d440mm	

Forced-air Oven with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.SWOF31050	Validation Service(IQ, OQ), with "SOF-50", **"SOFV1050"**	
DH.SWOF31105	, with "SOF-105", **"SOFV1105"**	
DH.SWOF31155	, with "SOF-155", **"SOFV1155"**	
DH.SWOF31305	, with "SOF-305", **"SOFV1305"**	
DH.SWOF32105	Validation Service(IQ, OQ), with "SOF-W105", **"SOFV2105"**	
DH.SWOF32155	, with "SOF-W155", **"SOFV2155"**	
DH.SWOF32305	, with "SOF-W305", **"SOFV2305"**	

(2) SMART-Window Model, Forced-air Oven



Stainless-steel Wire Shelf (Included)

>> DAIHAN WiRe™ App Service

4″ Full Touch Screen TFT LCD
(Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

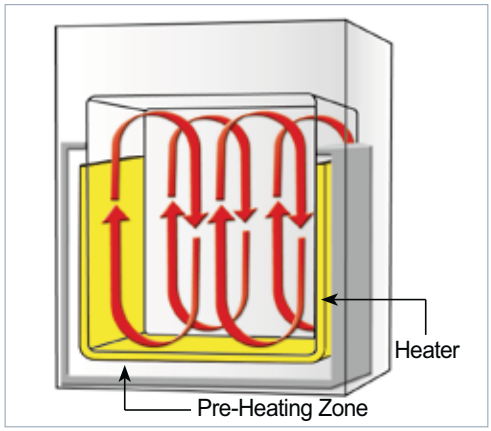
Controlled by Smart-Phone

DAIHAN® Gravity-air Oven "ThermoStable™ ON", 3-Side Heating Zone, 32 · 50 · 105 · 155 Lit, up to 230℃, ±0.5℃

With 2 × Wire Shelves/Digital PID Control/Jog-Dial & Push Button, Digital LCD/Back-light, with Certi. & Traceability

자연 대류식 정밀 건조기/오븐, 고정밀 디지털 퍼지 제어, 우수한 온도 정확성

(1) Standard Model, Gravity-air Oven



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Gravity-air Mechanism)

Perfect Door Lock by Double Latch

<Continued On Next Page>

- ***Made in Korea*** ***UL / CUL Certified*** ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism***
- ***Digital PID Control System Implementing Superior Temperature Accuracy***
- ***Optimized Air Flow by Gravity-air Mechanism***
- ***Patented Jog-Dial Control System***
- ***GD(Good Design)-mark*** ***PL(Product Liability) Insurance***

∗ Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
∗ The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism : 3-Side Heating
∗ New Jog-Dial with Push Button ∗ Compact New Body Design
∗ 2 ea of Stainless-steel Wire Shelf Included ∗ Alarm Function : Error status and Timer-end
∗ RS232C Interface for Monitoring and Controlling with PC
∗ Ambient +5℃ to 230℃ Range with Fluctuation of ±0.5℃ at 100℃
∗ Storage Function of Temperature and Timer setting values
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)
∗ Corrosion Resistant 304 Stainless-steel Chamber
∗ Over Temperature & Over Current Protection, Sensor Error Detection

Specification

Spec. \ Model		(1) Standard Model			
		ON-32 Max. Capa. 32L	ON-50 Max. Capa. 50L	ON-105 Max. Capa. 105L	ON-155 Max. Capa. 155L
				(2) Standard-Window Model	
				ON-W105	ON-W155
Capacity		32 Lit	50 Lit	105 Lit	155 Lit
Dimension (w×d×h)	Interior (mm)	310×290×360	370×350×420	485×409×535	550×474×600
	Exterior (mm)	458×557×664	518×647×724	653×712×882	718×777×947
Heater Power		500 W	650 W	1.4 kW	1.6 kW
Temp.	Range	Room Temp +5℃ to 230℃			
	Fluctuation	± 0.5℃ at 100℃, ± 0.6℃ at 150℃			± 0.5℃ at 100℃, ± 0.8℃ at 150℃
	Variation	± 1.2℃ at 100℃, ± 2.2℃ at 150℃			
	Sensor	PT 100			
Control Resolution		±0.1℃			
Heat-up Time		30 min. to 100℃, 43 min. to 150℃	30 min. to 100℃, 45 min. to 150℃		35 min. to 100℃, 50 min. to 150℃
Recovery Time (Door open 30sec)		8 min. to 100℃, 10 min. to 150℃		10 min. to 100℃, 12 min. to 150℃	
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button			
RS232 Port		Available to connect with PC			
Display		Digital LCD with Back Light			
Timer		99hr 59 min (delay/continuous function)			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf		2ea of Stainless-steel Wire Shelf included, Load per Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea		2ea	
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function (Temp. and Time) Locking Mode (Jog-Dial Input Disabled) Alarm (Error Status and Timer-end)			
Net Weight (kg)		36	44	69	78
Packing Size (w×d×h) (mm)		562×664×747	622×754×807	743×819×1,068	808×884×1,133
Shipping Weight (kg)		43	59	79	92
Power Consumption		502 W	674 W	1390 W	1566 W
Energy Consumption, at 100℃		90 Wh	117 Wh	187 Wh	204 Wh
, at 150℃		181 Wh	230 Wh	337 Wh	398 Wh
Electric Reqts.		120V, 60Hz or 230V, 50/60Hz			

∗ Other Specifications are available upon Customer's Request.

<*Continued From...*DAIHAN® Gravity-air Oven "ThermoStable™ ON">

Ordering Information

※ 운임 약 ₩ 25,000 별도!

(1) Standard Model, Gravity-air, with Wire Shelf

		Ea. Price, ₩
DH.WON05032	Oven, Standard, **230V, 32 Lit, "ThermoStable ON-32"**	
DH.WON05050	**, 50 Lit, "ThermoStable ON-50"**	
DH.WON05105	**, 105 Lit, "ThermoStable ON-105"**	
DH.WON05155	**, 155 Lit, "ThermoStable ON-155"**	
DH.WON06032	Oven, Standard, **120V, 32 Lit, "ThermoStable ON-32"**	
DH.WON06050	**, 50 Lit, "ThermoStable ON-50"**	
DH.WON06105	**, 105 Lit, "ThermoStable ON-105"**	
DH.WON06155	**, 155 Lit, "ThermoStable ON-155"**	

(2) Built in Viewing Window Model, Gravity-air, with Wire Shelf

		Ea. Price, ₩
DH.WON07105	Oven, Window, **230V, 105 Lit, "ThermoStable ON-W105"**	
DH.WON07155	**, 155 Lit, "ThermoStable ON-W155"**	
DH.WON08105	Oven, Window, **120V, 105 Lit, "ThermoStable ON-W105"**	
DH.WON08155	**, 155 Lit, "ThermoStable ON-W155"**	

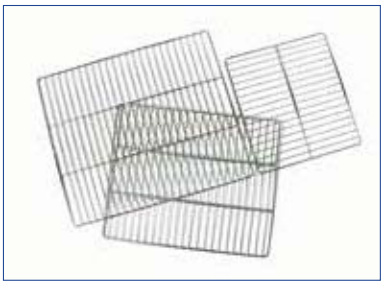
Spare Stainless-steel Wire Shelf

		Ea. Price, ₩
DH.WON11032	Wire Shelf, for **32 Lit., "ONS032"**, w280×d280mm	
DH.WON11050	, for **50 Lit., "ONS050"**, w340×d310mm	
DH.WON11105	, for **105 Lit., "ONS105"**, w455×d375mm	
DH.WON11155	, for **155 Lit., "ONS155"**, w520×d440mm	

Gravity-air Oven with Validation (IQ, OQ) Service

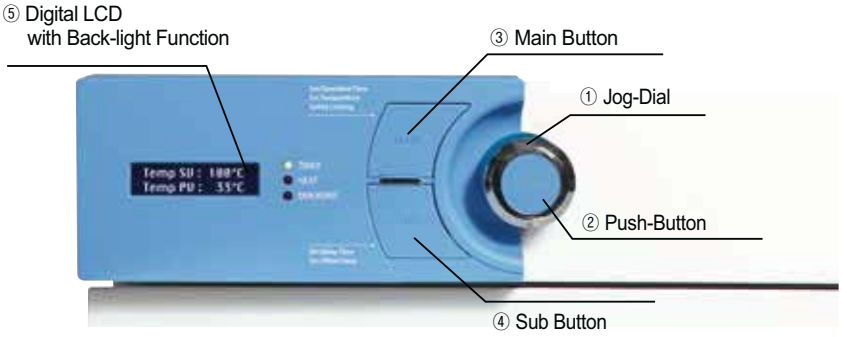
		Ea. Price, ₩
DH.WON31032	Validation Service(IQ, OQ), with "ON-32", **"ONV1032"**	
DH.WON31050	, with "ON-50", **"ONV1050"**	
DH.WON31105	, with "ON-105", **"ONV1105"**	
DH.WON31155	, with "ON-155", **"ONV1155"**	
DH.WON32105	Validation Service(IQ, OQ), with "ON-W105", **"ONV2105"**	
DH.WON32155	, with "ON-W155", **"ONV2155"**	

(2) Standard-Window Model, Gravity-air Oven



Stainless-steel Wire Shelf (Included)

New Jog-Dial Controller



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

WiseRemote Control Software :
Connection of Temperature Devices with Interface RS232C to a PC Export Recorded Data(Excel Spreadsheet)

* You can Download this Software at DAIHAN-Sci.com Shopping-mall

DAIHAN® SMART Gravity-air Oven "ThermoStable™ SON", 3-Side Heating Zone, 32 · 50 · 105 · 155 Lit

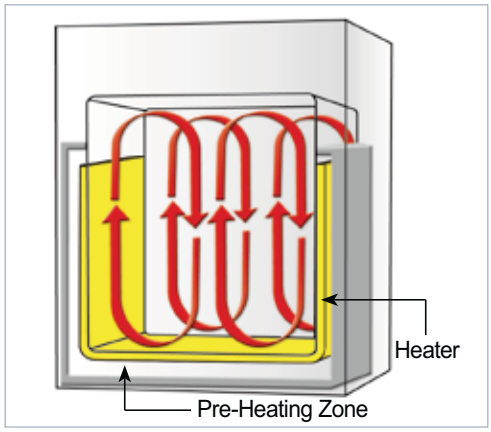
With Smart-Lab™ Controller, 4″ Full Touch Screen, Fuzzy-PID Control, WiRe™ Service, with Certi. & Traceability, up to 230℃, ±0.5℃

스마트 자연 대류식 정밀 건조기/오븐, 우수한 온도 정확성/균일성, WiRe™서비스, 4인치 풀터치스크린 조절기

(1) Standard Model, "ThermoStable™ SON-105"

- ■ *Made in Korea* ■ *UL / CUL Certified* ■ *CE Certified*
- ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*
- ■ *3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism*
- ■ *Digital Fuzzy Control System Implementing Superior Temperature Accuracy*
- ■ *Smart-Lab™ Controller* ■ *Optimized Air Flow by Gravity-air Mechanism*
- ■ *GD(Good Design)-mark* ■ *PL (Product Liability) Insurance*

∗ Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
∗ Ergonomic Design 4″ Full Touch Screen TFT LCD(Smart-Lab™ Controller)
∗ WiRe™ App Service. ∗ Automatic Data Recording
∗ Self-Diagnostic Function ∗ Internet Connectivity with WiFi
∗ Variable Program Setting for Multiple Patterns with Multiple Segments
∗ The Recorded Data could be transferred to PC by USB memory
∗ Controller SW can be upgraded through USB port.
∗ Compact New Body Design ∗ 2ea of Stainless-steel Wire Shelf Included
∗ RS232C Interface for Monitoring and Controlling with PC
∗ Ambient to 230℃ of Temp. Range, Fluctuation of ±0.5℃ at 100℃
∗ Corrosion Resistant 304 Stainless-steel Chamber
∗ Over Temperature & Over Current Protection, Sensor Error Detection



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Gravity-air Mechanism)

Perfect Door Lock by Double Latch

Specification

Spec. \ Model		(1) SMART Model			
		SON-32 Max. Capa. 32L	SON-50 Max. Capa. 50L	SON-105 Max. Capa. 105L	SON-155 Max. Capa. 155L
				(2) SMART-Window Model	
				SON-W105	SON-W155
Capacity		32 Lit	50 Lit	105 Lit	155 Lit
Dimension (w×d×h)	Interior (mm)	310×290×360	370×350×420	485×409×535	550×474×600
	Exterior (mm)	458×557×664	518×647×724	653×712×882	718×777×947
Heater Power		500 W	650 W	1.4 kW	1.6 kW
Temp.	Range	Room Temp +5℃ to 230℃			
	Fluctuation	± 0.5℃ at 100℃, ± 0.6℃ at 150℃			± 0.5℃ at 100℃, ± 0.8℃ at 150℃
	Variation	± 1.2℃ at 100℃, ± 2.2℃ at 150℃			
	Sensor	PT 100			
Control Resolution		±0.1℃			
Heat-up Time		30 min. to 100℃, 43 min. to 150℃	30 min. to 100℃, 45 min. to 150℃		35 min. to 100℃, 50 min. to 150℃
Recovery Time (Door open 30sec)		8 min. to 100℃, 10 min. to 150℃		10 min. to 100℃, 12 min. to 150℃	
Controller		Smart-Lab™ Controller			
RS232 Port		Available to connect with PC			
Display		4″ Full Touch Screen TFT LCD			
Timer		99hr 59 min (delay/continuous function)			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf		2ea of Stainless-steel Wire Shelf included, Load per Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea		2ea	
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Others		UL/CUL Certified, CE Certified, GD-mark Storage Function (Temp. and Time) Locking Mode (Jog-Dial Input Disabled) Alarm (Error Status and Timer-end)			
Net Weight (kg)		36	44	69	78
Packing Size (w×d×h) (mm)		562×664×747	622×754×807	743×819×1,068	808×884×1,133
Shipping Weight (kg)		43	59	79	92
Power Consumption		502 W	674 W	1390 W	1566 W
Energy Consumption, at 100℃		90 Wh	117 Wh	187 Wh	204 Wh
, at 150℃		181 Wh	230 Wh	337 Wh	398 Wh
Electric Reqts.		120V, 60Hz or 230V, 50/60Hz			

∗ Other Specifications are available upon Customer's Request.

<Continued On Next Page>

<*Continued From...*DAIHAN® SMART Gravity-air Oven "ThermoStable™ SON">

Ordering Information

※ 운임 약 ₩ 25,000 별도!

(1) Standard Model, Gravity-air, with Wire Shelf

		Ea. Price, ₩
DH.SWON05032	Oven, Standard, **230V, 32 Lit, "ThermoStable SON-32"**	
DH.SWON05050	**, 50 Lit, "ThermoStable SON-50"**	
DH.SWON05105	**, 105 Lit, "ThermoStable SON-105"**	
DH.SWON05155	**, 155 Lit, "ThermoStable SON-155"**	
DH.SWON06032	Oven, Standard, **120V, 32 Lit, "ThermoStable SON-32"**	
DH.SWON06050	**, 50 Lit, "ThermoStable SON-50"**	
DH.SWON06105	**, 105 Lit, "ThermoStable SON-105"**	
DH.SWON06155	**, 155 Lit, "ThermoStable SON-155"**	

(2) Built in Viewing Window Model, Gravity-air, with Wire Shelf

		Ea. Price, ₩
DH.SWON07105	Oven, Window, **230V, 105 Lit, "ThermoStable SON-W105"**	
DH.SWON07155	**, 155 Lit, "ThermoStable SON-W155"**	
DH.SWON08105	Oven, Window, **120V, 105 Lit, "ThermoStable SON-W105"**	
DH.SWON08155	**, 155 Lit, "ThermoStable SON-W155"**	

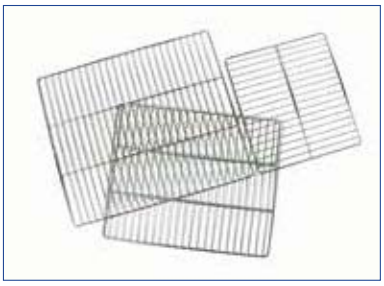
Spare Stainless-steel Wire Shelf

		Ea. Price, ₩
DH.WON11032	Wire Shelf, for **32 Lit, "ONS032",** w280×d280mm	
DH.WON11050	, for **50 Lit, "ONS050",** w340×d310mm	
DH.WON11105	, for **105 Lit, "ONS105",** w455×d375mm	
DH.WON11155	, for **155 Lit, "ONS155",** w520×d440mm	

Gravity-air Oven with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.SWON31032	Validation Service(IQ, OQ), with "SON-32". **"SONV1032"**	
DH.SWON31050	, with "SON-50", **"SONV1050"**	
DH.SWON31105	, with "SON-105", **"SONV1105"**	
DH.SWON31155	, with "SON-155", **"SONV1155"**	
DH.SWON32105	Validation Service(IQ, OQ), with "SON-W105", **"SONV2105"**	
DH.SWON32155	, with "SON-W155", **"SONV2155"**	

(2) SMART-Window Model, Gravity-air Oven



Stainless-steel Wire Shelf (Included)

>> DAIHAN WiRe™ App Service

4″ Full Touch Screen TFT LCD
(Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

Controlled by Smart-Phone

Articles	Cat. No	Description

"ThermoStable™ WOC" High Clean Air Oven, with Class 100 HEPA Filter, 560 · 800 Lit, with Certi. & Traceability

With Chrome Coated Steel Wire Shelves, Digital Fuzzy Control System, Clean Air Convection Mechanism, up to 250℃, ±1.0℃

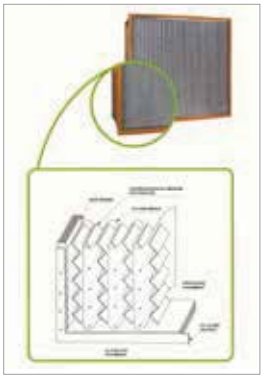
청정 고온 건조기/오븐, 고정밀 디지털 퍼지 제어, 우수한 청정도

High Clean Air Oven, with HEPA Filter
"ThermoStable™ WOC-560"

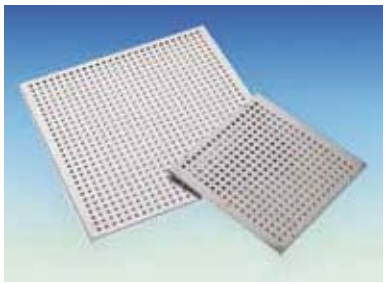
- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Specially Designed Clean Air Convection Mechanism Provides Dynamic Air Flow for Exhaust of Contaminated Air from the Chamber and Supply of Filtered Clean Air into the Chamber***
- ■ ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy.***
- ■ ***Patented Jog-Shuttle Control System***

∗ Suitable for Critical Clean Application such as Electronics, Semiconductor, Pharmaceutical and Clinical Applications - Class 100 HEPA Filter is used.
∗ Specially Designed Clean Air Convection Mechanism Provides Dynamic Air Flow for Exhaust of Contaminated Air from the Chamber and Supply of Filtered Clean Air into the Chamber
∗ Digital Fuzzy Control System Implementing Superior Temperature Accuracy
∗ User's Self-Compensation Function to Control Difference between Real Temp. and Indicated Temp. (±20.0℃)
∗ Storage Function : Set Values of Temperature and Timer
∗ Locking Mode Supported for Experimental Safety(Input to Jog-Shuttle can be Disabled)
∗ Over Temperature & Over Current Protection, Sensor Error Detection

High Efficiency and High Clean Air Convection Mechanism



High Temp. HEPA Filter



(1) Perforated Shelf, Stainless-steel (Included)

Specifications & Ordering information

Spec. \ Model		"WOC-560" Max. Capa. 560L	"WOC-800" Max. Capa. 800L
Capacity		**560 Lit**	**800 Lit**
Air Flow-type		High Clean Air Convection Mechanism	
Filter for Clean Air		HEPA Filter Class 100 for High Temperature	
Temp.	**Range & Sensor**	Room Temp. +5℃ to 250℃, PT100 Sensor	
	Accuracy & Uniformity	± 1.0℃, ± 2.0℃ at 200℃	
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back Light	
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch(Turn+Push)	
Verification		Timer Operated Verification System	
Resolution		Control : ±1.0℃, Display : ±1.0℃	
Shelf		3ea of Perforated Shelf of Adjustable Position	
Load per Rack		16 kg, Total : 48 kg (16kg×3 Shelf)	
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector	
Material		Internal : Stainless-steel (#304), External : Powder Coated steel, Insulation : Glass Wool	
Others		Storage Function, Locking Mode	
Dimension (w×d×h)	**Interior (mm)**	800×700×1,000	1,000×800×1,000
	Exterior (mm)	1,000×1,155×1,735	1,500×1,200×1,900
Packing Size (w×d×h) (mm) & Gross Weight		1,200×1,400×h2,120mm, 386 kg	1,700×1,400×h2,270mm, 446 kg
Power Consumption		6.5 kW	9.4 kW
Electric Reqts.		60Hz or AC 230V, 380V 50/60Hz or 3 Phase	
Cat. No.	**230V 3 Phase**	**DH.WOC00560**	**DH.WOC00800**
	380V 3 Phase	**DH.WOC03560**	**DH.WOC03800**
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

※ 운임 약 ₩ 85,000 별도!

Spare Perforated Shelf, Stainless-steel

		Ea. Price, ₩
DH.WOC10560	(1) Perforated Shelf, **"OCS560"**, w780×d680, for **"WOC-560"**	
DH.WOC10800	, **"OCS800"**, w980×d880, for **"WOC-800"**	

Optional N_2 Gas Inlet Device

		Ea. Price, ₩
DH.WOCN2GIN	N_2 Gas Inlet Device, **"WOC-N2GIN"**	

High Clean Air Oven with Validation (IQ, OQ) Service

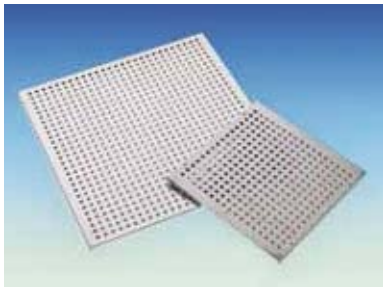
		Ea. Price, ₩
DH.WOC30560	Validation Service(IQ, OQ), with "WOC-560", **"OCV560"**	
DH.WOC30800	, with "WOC-800", **"OCV800"**	

"ThermoStable™ WOF" Industrial Forced-air Oven, 486 · 840 · 1176 Lit, with Certi. & Traceability

With Stainless-steel Perforated Shelves, Digital PID Control System, Superior Temp. Accuracy, up to 250℃, ±1.0℃

대용량 산업용 열풍 순환식 건조기 / 오븐, 우수한 온도 정확성

Industrial Forced-air Oven "ThermoStable™ WOF-L1000" with Stainless-steel Perforated Shelf



(1) Perforated Shelf, Stainless-steel (Included)

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Heavy Forced Air-Circulation by Strong and Reliable Fan System : ideal for Semiconductor and Electronic Parts Baking Purpose***

* Heavy Forced Air-Circulation by Strong and Reliable Fan System : Ideal for Semiconductor and Electronic Parts Baking Purpose
* Voltage and Ampere Meter Equipped for Monitoring Safe Operation of the Machine
* Digital PID Control System Enables Superior Temperature Accuracy
* Digital Timer Function with Buzzer Alarm : up to 99 hrs 59 min
* Locker is Available for Operational Safety Control by an Administrator
* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking
* Multi-Channel Temperature Sensors with Digital Display for Monitoring Temperature Uniformity in the Chamber is available(Optional)
* Default Damper to Enhance Thermal Efficiency * Automatic Gas Exhaust Available (Optional)

Specifications & Ordering information

Spec. \ Model		"WOF-L400" Max. Capa. 486L	"WOF-L800" Max. Capa. 840L	"WOF-L1000" Max. Capa. 1,176L
Capacity		486 Lit	840 Lit	1,176 Lit
Air Flow-type		Forced-air Type		
Air Circulation Fan Motor		1/3HP	1/3 HP × 2 ea	1/3HP × 3 ea
Temp.	Range	Room Temp. +5 ℃ to 250 ℃		
	Accuracy	± 1.0 ℃ at 150 ℃		
	Uniformity	± 2.0 ℃ at 150 ℃		
	Sensor	PT100		
Heating Power/Consumption		3 kW	5 kW	7 kW
Timer & Alarm		99hr 59min (with Continuous run.), Timer-end Alarm		
Display		2 lines LED for Temperature and Timer		
Controller		Digital PID Control		
Resolution		Control : ±1.0℃, Display : ±1.0℃		
Door		Powder coated Steel Door with Silicon Packing		
		1 Door	2 Doors	
Shelf		Included Stainless-steel Perforated Shelf		
		3 ea	3 ea	6 ea
Load per Rack		16 kg		
Permitted Total Load		48 kg (16kg×3 Shelf)		96 kg (16kg×6 Shelf)
Material		Internal : Stainless-steel (#304), External : Powder Coated steel, Insulation : Ceramic and Glass Wool Board		
Dimension (w×d×h)	Interior (mm)	900×600×900	1,250×700×960	1,400×700×1,200
	Exterior (mm)	1,200×750×1,700	1,500×840×1,800	1,650×840×2,150
Net Weight		316 kg	408 kg	478 kg
Others		Over Temp. and Over Current Protector, Sensor Error Detector, Leakage Breaker Locking Mode by Mechanical Locker		
Packing Size (w×d×h) (mm) & Gross Weight		1,400×1,220×1,960	1,700×1,310×2,060	1,850×1,310×2,410
		376 kg	488 kg	568 kg
Power Consumption		3.6 kW	6.2 kW	8.8 kW
Electric Reqts.		1Phase AC 230V, 50/60Hz	1Phase AC 230V, 50/60Hz	3Phase AC 380V, 50/60Hz
Cat. No.	230V	DH.WOFL0400	DH.WOFL0800	-
	3 Phase	-	DH.WOFL0802	DH.WOFL1002
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 85,000 별도!

Spare Perforated Shelf, Stainless-steel

		Ea.	Price, ₩
DH.WOF10400	(1) Perforated Shelf, **"OFLS400"**, w880×d580mm, for **"WOF-400"**		
DH.WOF10800	, **"OFLS800"**, w1230×d680mm, for **"WOF-800"**		
DH.WOF11000	, **"OFLS1000"**, w660×d680mm, for **"WOF-1000"**		

Industrial Forced Convection Oven with Validation (IQ, OQ) Service

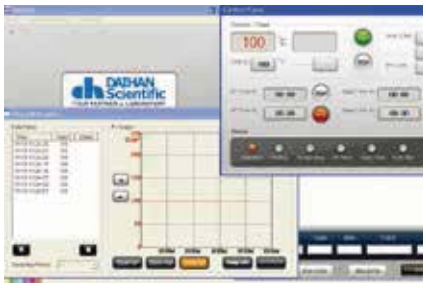
		Ea.	Price, ₩
DH.WOF30400	Validation Service(IQ, OQ), with "WOF-L400", **"OFLV400"**		
DH.WOF30800	, with "WOF-L800", **"OFLV800"**		
DH.WOF31000	, with "WOF-L1000", **"OFLV1000"**, 3Phase		

DAIHAN® Gas Exchangeable Precise Vacuum Oven "ThermoStable™ OV", 20 · 30 · 70 Lit, 10~750 mmHg, 200℃

With Highly Safety View Window, 2 Al-Shelf, Digital PID Control, Superior Temp. & Vacuum Accuracy, with Certi. & Traceability

Excellent Thermal Conductivity, 정밀 진공 건조기/오븐, 고정밀 디지털 퍼지 제어, 알루미늄 선반 포함

Precise Vacuum Oven "ThermoStable™ OV-30"



WiseRemote Coltrol Software :
Connection of Temperature Devices with Interface RS232C to a PC Export Recorded Data(Excel Spreadsheet)

*** You can Download this Software at DAIHAN-Sci.com Shopping-mall**

(1) Standard Shelf, Al.(Included)

▶ **Gas Exchangeable, High Heat Conduction and New Jog-Dial Controller & Precise Gauge**

▶ **WiseRemote Control Software ; Download at DAIHAN-Sci.com.**

- ■ ***Made in Korea*** ■ ***UL / CUL & CE Certified***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Suitable for Drying, Baking, Conditioning, Curing, Out-Gassing Solids and Liquids, Vacuum Embedding, Moisture Testing, Plating and Aging Test***
- ■ ***Patented Jog-Dial Control System and Back-Light LCD***
- ■ ***PL (Product Liability) Insurance***

∗ Very Easy and Convenient for Vacuuming and Venting, Easy to read Vacuum Gauge
∗ Highly Safety Viewing Window (Tempered Safety Glass + Polycarbonate Window)
∗ Heavy-duty Safety Front Door for User Safety
∗ RS232C Interface for Remote Monitoring and Controlling with PC
∗ Superior Uniformity and Stability ∗ Storage Function : Alarm & Timer
∗ High Quality Door Sealing : High Temperature Grade Silicone Molded Gasket
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

Specifications & Ordering information

Spec. \ Model		ThermoStable™ OV-20 Max. Capa. 20 Lit	ThermoStable™ OV-30 Max. Capa. 30 Lit	ThermoStable™ OV-70 Max. Capa. 70 Lit
Capacity		20 Lit	30 Lit	70 Lit
Vacuum Range & Level & Rate		10 ~ 750 mmHg, 0.63mbar, 0.39mbar/hr		
Temp.	Range / Sensor	R/T +10℃ to 200℃, PT100		
	Accuracy	± 0.5℃ at 100℃ & 150℃		
	Uniformity	± 2.0℃ at 100℃, ±3.0℃ at 150℃		± 2.5℃ at 100℃, ± 3.5℃ at 150℃
Heating Power/Consumption		170W×2ea 130W×2ea		350W×2ea 450W×2ea
Heat-up Time		60 min. to 100℃, 90 min. to 150℃	70 min. to 100℃, 100 min. to 150℃	80 min. to 100℃, 100 min. to 150℃
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end		
Display		Digital LCD with Back Light		
Controller		Digital PID Controller with Jog-Dial Switch (Turn & Push)		
Resolution		Control : ±1.0℃, Display : ±1.0℃		
Shelf (Included)		2 Aluminum Shelf		
Safety Circuit		Over Temp. & Over Current Protector, Sensor Error Detector, Leakage Breaker		
Material		Internal : Stainless-steel (#304), External : Powder Coated steel, Window : Tempered Safety Glass 12T, Poly Carbonate 5T for Safety		
Others		Storage Function (Temp and Timer), Locking Mode (Jog-Dial Input Disabled)		
Dimension (w×d×h)	Interior (mm)	265×290×265	300×330×300	400×435×400
	Exterior (mm)	480×475×547	515×515×582	618×620×682
Vacuum Inlet Valve Size		od. 10 mm		
Net Weight		48 kg	55 kg	85 kg
Packing Size (w×d×h) (mm) & Gross Weight		570×570×775 59 kg	605×605×815 67 kg	710×710×910 100 kg
Power Consumption		600 W	600 W	1.6 kW
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WOV03020	DH.WOV03030	DH.WOV03070
	120V	DH.WOV04020	DH.WOV04030	DH.WOV04070
Price, Each. ₩				

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 25,000 별도!

Spare Aluminum Shelf

		Ea. Price, ₩
DH.WOV12020	(1) Standard Shelf, Alu., **"OVSN020"**, 260×245×h3mm, for **20 Lit**	
DH.WOV12030	, **"OVSN030"**, 290×285×h3mm, for **30 Lit**	
DH.WOV12070	, **"OVSN070"**, 390×390×h3mm, for **70 Lit**	

※Note! Optional Vacuum Pump : See the "Pump" Section.

DAIHAN® SMART Vacuum Oven "ThermoStable™ SOV", Highly Safety Viewing Window, 20 · 30 · 70 Lit, 200℃
With Smart-Lab™ Controller, 4″ Full Touch Screen, Fuzzy-PID Control, Superior Temp. & Vacuum Accuracy, 10~750 mmHg
스마트 진공 건조기/오븐, 고정밀 디지털 퍼지 제어, 알루미늄 선반 포함, with Certi. & Traceability

SMART Vacuum Oven "ThermoStable™ SOV-30"

- ■ ***Made in Korea*** ■ ***UL / CUL & CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Suitable for Drying, Baking, Conditioning, Curing, Out-Gassing Solids and Liquids, Vacuum Embedding, Moisture Testing, Plating and Aging Test***
- ■ ***Smart-Lab™ Controller***
  - WiRe™ App Service.
  - Automatic Data Recording
  - Self-Diagnostic Function
  - Internet Connectivity with WiFi
  - Variable Program Setting for Multiple Patterns with Multiple Segments
  - The Recorded Data Could be transferred to PC by USB memory
  - Controller SW can be upgraded through USB port.

∗ Very Easy and Convenient for Vacuuming and Venting, Easy to read Vacuum Gauge
∗ Highly Safety Viewing Window (Tempered Safety Glass+ Polycarbonate Window)
∗ Heavy-duty Safety Front Door for User Safety ∗ Compact New Body Design
∗ High Quality Door Sealing : High Temperature Grade Silicone Molded Gasket
∗ Over Temperature & Over Current Protection and Sensor Error Detection

Display of Smart-Lab™ Controller

(1) Standard Shelf, Al.(Included)

Specifications & Ordering information

Spec. \ Model		ThermoStable™ SOV-20 Max. Capa. 20 Lit	ThermoStable™ SOV-30 Max. Capa. 30 Lit	ThermoStable™ SOV-70 Max. Capa. 70 Lit
Capacity		**20 Lit**	**30 Lit**	**70 Lit**
Vacuum Range & Level & Rate		10 ~ 750 mmHg, 0.63mbar, 0.39mbar/hr		
Temp.	**Range / Sensor**	R/T +10 ℃ to 200 ℃, PT100		
	Accuracy	± 0.5℃ at 100℃ & 150℃		
	Uniformity	± 2.0℃ at 100℃, ±3.0℃ at 150℃		± 2.5℃ at 100℃, ± 3.5℃ at 150℃
Heating Power/Consumption		170W×2ea 130W×2ea		350W×2ea 450W×2ea
Heat-up Time		60 min. to 100 ℃, 90 min. to 150 ℃	70 min. to 100 ℃, 100 min. to 150 ℃	80 min. to 100 ℃, 100 min. to 150 ℃
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end		
Display		4″ Full Touch Screen TFT LCD		
Controller		Smart-Lab™ Controller		
Resolution		Control : ±1.0℃, Display : ±1.0℃		
Shelf		Included 2ea Aluminum Shelf		
Safety Circuit		Over Temp. & Over Current Protector, Sensor Error Detector, Leakage Breaker		
Material		Internal : Stainless-steel (#304), External : Powder Coated steel, Window : Tempered Safety Glass 12T, Poly Carbonate 5T for Safety		
Others		Program Function, WiRe™ App & Web Service.		
Dimension (w×d×h)	**Interior (mm)**	265×290×265	300×330×300	400×435×400
	Exterior (mm)	480×475×547	515×515×582	618×620×682
Vacuum Inlet Valve Size		od. 10 mm		
Net Weight		48 kg	55 kg	85 kg
Packing Size (w×d×h) (mm) & Gross Weight		570×570×775 59 kg	605×605×815 67 kg	710×710×910 100 kg
Power Consumption		600 W	600 W	1.6 kW
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	**230V**	**DH.SWOV03020**	**DH.SWOV03030**	**DH.SWOV03070**
	120V	**DH.SWOV04020**	**DH.SWOV04030**	**DH.SWOV04070**
Price, Each. ₩				

∗ Other Specifications are available upon Customer's Request. ※ 운임 약 ₩ 25,000 별도!

Spare Aluminum Shelf

		Ea. Price, ₩
DH.WOV12020	(1) Standard Shelf, Alu., **"OVSN020"**, 260×245×h3mm, for **20 Lit**	
DH.WOV12030	, **"OVSN030"**, 290×285×h3mm, for **30 Lit**	
DH.WOV12070	, **"OVSN070"**, 390×390×h3mm, for **70 Lit**	

※Note! Optional Vacuum Pump : See the "Pump" Section.

(1) VOP-60

(2) VOP-100

(3) VOP-150

(4) VOP-200

(5)

(6)

Vacuumer® Precision Vacuum Pump "VOP-Series", Gas Ballast Valve Installed, 50~240 Lit With Double-Stage, Direct Drive & Oil Sealed Rotary Type, 정밀 고급형 진공펌프

- ***Made in Korea***
- ***Oil Back Flow Prevention Mechanism Installed***
- ∗ Easy-to-use Large Finger Grips
- ∗ Over Current Protection
- ∗ Installed Filter Prevent Sludge Contamination
- ∗ Physical and Chemical Apparatus Industries
- ∗ Ideal for Vacuum Evaporation Equipment / Vacuum Dryer / Vacuum Freeze Dryer, etc.

Specifications & Ordering information

Model	VOP-60	VOP-100	VOP-150	VOP-200
Pumping Speed (50/60Hz)	50 / 60 Lit/min	100 / 120 Lit/min	150 / 180 Lit/min	200 / 240 Lit/min
Ultimate Pressure (Pa)	6.7×10^{-2} Pa			
Vacuum Degree (mbar)	6.7×10^{-4} mbar			
Motor Power	Single Phase 220V 200W, 4poles	Single Phase 220V 400W, 4poles	Single Phase 220V, 550W, 4poles	
Motor Speed(50/60Hz)	1430 / 1730 RPM			
Recommended Oil	COSMA-100			
Oil Capacity(mL)	800	900	1000	1100
Suction Pipe(o.d×i.d)	NW25(KF25)			
Temp. Range	7~40℃			
Weight	17kg	25kg	28.5kg	30kg
Dimensions(w×d×h)(mm)	165×411×234	171×464×238	189×504×253	189×524×253
Electric Reqts.	220V, 50 / 60Hz			
Cat. No.	V3.VOP060	V3.VOP100	V3.VOP150	V3.VOP200
Price, Ea. ₩				

∗ Per Customer's request various specifications are available.
∗ Using the Macleod gauge the ultimate pressure is measured. The measurements from the pirani gauge are show In ( ).

Optional Accessory for VOP-series

Oil Mist Trap

∗ Available Less than 200L/min Model, Access Port : NW25(KF25)

V3.OMT150 (5) Oil Mist Trap for VOP-60 / VOP-100 / VOP-150

∗ Available Less than 560L/min Model, Access Port : NW25(KF25)

V3.OMT300 (6) Oil Mist Trap for All VOP-series

Vacuum Pump Oil

V3.COS101 (7) Oil for Vacuum Pump VOP-series, 1Lit
V3.COS104 (8) , 4Lit

(7) & (8)
Oil 1 & 4Lit

Ea.	Price, ₩

Ea.	Price, ₩

DAIHAN® 105mbar Oil Free Vacuum Pump "PU-300", with Fine Vacuum Regulator and Moisture Trap, 20Lit/min NEW
With Prote™ Overflow Protection, Built-in Thermal Protection, Protection Class IP30, 진공 펌프

105mbar Oil Free Vacuum Pump "PU-300"

- ***CE, CSA, and RoHS Certified***
- ***Used for General Filtration, Microbiological Test, Suspended Solid Test, Solid-Phase Extraction, Microplate Vacuum Manifold, Air Sampling, etc.***

∗ Driven by Piston without Lubricant, Regular Oil Change and Maintenance ; No Oil Pollution
∗ Prote™ Overflow Protection is Installed to Prevent a Large Amount of Liquid from being Sucked into the Pump.
∗ Equipped with Filter Cartridge in Air Inlet to Filter Particle and Moisture to Prolong the Life of Pump.

※ 운임 별도!

Spec. \ Model	"PU-300"
Speed of Evacuation	20 Lit/min
Max. Vacuum	105 mbar
Motor Power & Max. Current	60 W, 0.3A
Motor Rotation & Noise Level	1450 rpm, 50 dB
Hose Barb	8 mm
Size & Weight	268×135×h204 mm, 4.1kg
Electric Rqts.	220V, 50Hz
Cat. No.	DH.Pu0300
Price, Each. ₩	

DAIHAN® 15mbar Anticorrosive Vacuum/Pressure Diaphragm Pump "PU-30", 25psi, 30Lit/min NEW
Ideal for Multi-purpose, Oil-free, Double Heads, 내부식성 진공/압력 다이어프램 펌프, 더블헤드

15mbar Vacuum/Pressure Diaphragm Pump "PU-30"

- ***Used for Centrifugal Concentration, Evaporating System, Reduced Pressure Distillation, Solid Phase Extraction, Vacuum Concentration, Vacuum Filtration & Drying System, etc.***
- ***Resistance to Chemicals ; the Parts in Contact with the Gas are PTFE Coated.***

∗ Tolerance to almost all Strong Acid, Alkali, Oxidizer, Reductant and Organic Solvents
∗ No Air Pollution due to the Gas Exchange Room with Filtering Material
∗ Automatic Cooling Exhaust System ensures Continuous Operation 24hrs a day.
∗ Automatic Power off to Protect Motor when the Pump Body Temp Reached at 130℃.

※ 운임 별도!

Spec. \ Model	"PU-30"
Speed of Evacuation	30 Lit/min
Max. Vacuum & Max. Pressure	15 mbar, 25 Psi
Motor Power	160 W
Noise Level & Temp of the body	＜60 dB & ＜55℃
Pump Head	2
Inlet & Outlet (mm)	id.Φ6 & 6 mm, od.Φ8 & 8 mm
Diaphragm & Valves	PTFE
Size & Weight	370×144×h275 mm, 13.5kg
Electric Rqts.	220V, 50Hz
Cat. No.	DH.Pu8030
Price, Each. ₩	

DAIHAN® 10mbar Anticorrosive Vacuum Diaphragm Pump "PU-20", with Fine Regulator and Moisture Trap, 18Lit/min
With Built-in Thermal Protection, Quit and Low Vibration, 내부식성 저소음/저진동 진공 다이어프램 펌프 NEW

10mbar Anticorrosive Vacuum Diaphragm Pump "PU-20"

- ***Used for Solvent purification, Gel dryer, Rotary Evaporator, Vacuum Filtration, etc.***
- ***Resistance to Chemicals ; the Parts in Contact with the Gas are PTFE Coated.***

∗ Driven by Diaphragm without Lubricant, Regular Oil Change and Maintenance ; No Oil Pollution
∗ Quiet and Low Vibration ∗ Built-in Thermal Protection

※ 운임 별도!

Spec. \ Model	"PU-20"
Speed of Evacuation	18 Lit/min
Max. Vacuum	10 mbar
Motor Power & Max. Current	90 W, 0.5A
Motor Rotation & Noise Level	1450 rpm, 52dB
Hose Barb	8mm
Size & Weight	262×236×h193 mm, 7.4kg
Electric Rqts.	220V, 50Hz
Cat. No.	DH.Pu8020
Price, Each. ₩	

Improving the Productivity of Your Chemistry - - -

New Innovation LaboRactor™ 0.1 ~ 100Lit

All for Glass Reaction System for Lab & Pilot Plant

AutoLifting- / Classic- / H.Mantle-Models in Vacuum-Line, -80℃ +260℃

with Glass Vessel / Lid or PTFE Lid, 45° DN Flange , Safety Connection, and Assembly Frame

Ideal for ▶Experiment, ▶Pilot- & Mass-Production

5~100 Lit. AutoLifting-Model Ⅰ
Manual Tilt, Double-Wall Vessel
High Performance
Ideal for Cleaning

5~100 Lit. Classic-Model Ⅱ
Double-Wall Vessel
Good for Economic
Operation

0.5~20 Lit. Suspended-Model Ⅲ
Double-Wall Vessel
Good for Economic
Operation

2~50 Lit. H.Mantle-Model Ⅳ
Single-Wall Vessel
Good for Simply
Economic Operation

High-Torque Digital Overhead Stirrer

PTFE Lids & Clamping Sys.

Flasks, Round-type

Vessel, Double Wall

PTFE Stirring Impeller

and

General Multi-Neck Flasks

LaboRactor™ 0.1~100Lit All for Reaction System, for Lab & Pilot Plant, with Glass Vessel, −80℃+260℃

Ideal for Chemistry / Pharmacy / Biomedical / Synthesis in Laboratory & Production Scales in Vacuum Line

For Reaction, Mixing, Dispersion & Homogenization, 0.5~1.5bar, **연구 및 제품 생산용 진공반응장치**

AutoLifting and Manual Tilting Reactor System "Model-Ⅰ"

Applications

- ***Ideal for the Experiment, Pilot Production, and Production in Chemistry / Fine Chemical Engineering / Pharmacy / Synthesis, and Biomedical Engineering.***
- ***Dispersion, Distillation, Evaporation, Homogenization & Mixing Processes at Laboratory & Production-Scales.***

Features

- ***Can be Used Direct Contact Thermo-Probe "K-type"***
- ***Modular System:***
  You can choose Glass Vessel & Lid or PTFE-Lid, Stirrers, Vacuum Pump & Controller, Heating Mantle, Chiller / Cooler or Heating Circulator.
- ***Wide-Range Vessels and Convenience:***
  ∗ 0.1~100Lit Vacuum-Purpose Vessels or General Multi-Neck Flasks.
  ∗ Single or Double Walled Glass Vessels.
  ∗ With or Without Out-Let Valve at Vessel Bottom.
- ***"45° DN 60~ DN 200" Standardized Flat-Flange System :*** with a Comprehensive Range of Accessories and Replacement Parts.
- ***Convenient O-Ring GROOVE in the Vessel's Flange:***
  Ideal for Vacuum or Pressure Applications, and Safe Mounting of the Vessel with the Associated Lid.
- ***All PTFE Safety Lid with Screw Ⓢ Joint or Glass Lid Available : You can choose***
- ***Safety Flexible PTFE Connection for All Ⓢ Joint Parts.***
- ***Fully Digital Feedback / Microprocessor Controlled Agitator(Stirrer) :***
  LCD Display, Power Bar Graph & Status, Over-Load /-Heat Protection Function.
- ***With Safety Flexible Coupling between Stirring-Motor & Shaft.***
- ***Easy Installation ; Assembly Frame & Component Parts.***
  ∗ Good for Heavier-Work.
  ∗ Modular Components-Spare or Option Parts.
  ∗ Bench- or Floor-Type Assembly Frames.
  ∗ Adjustable Height Length and Removable Frame.
  ∗ Suppling the Component Parts.

LaboRactor™ 5~100 Lit AutoLifting Vacuum Reactor Set, with Jacketed Glass Vessel · Agitator · Frame · Glass Assembly With DN O-ring Flange / PTFE-Impeller & -Drainvalve, Digital Agitation & Lifting System, 자동리프팅/자켓 글라스 진공 반응조 셋트

▶ Advantage of Lifting System

- ***Safety Cleaning the Vessel***
- ***Easy Feeding of Large Volume Raw Materials***
- ***Ideal for Maintenance***

(A) AutoLifting & Manual Tilt Reactor Set, −80℃+260℃

(1) Glass Lid
With 5 Joints

(2) All PTFE Lid
With 6 Screwjoint
◎ Top Safety : Non-Breakage, Anti-Chemical, & +280℃

▶ AutoLifting "Up-Down" and Manual Tilt System

- ***With Induction Gear Motor, TM-Screw, Timing Belt & Pulley, and Limit Switch***

∗ Adjustable Lifting Speed 1~53rpm & Height Length 200~500mm ∗ Tilt Angle 30 Degree

▶ Graduated Double-wall Vacuum Glass Vessel, 5~100Lit

- ***45° DN Flange & 5mm Thick High Boro-glass 3.3 with Good Physical, Chemical Properties.***
- ***PTFE Lid ; -80℃ ~ +260℃*** ■ ***PTFE Drain Valve ; Aperture Φ25mm, No-Dead Space***

∗ Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.
∗ Cooling and Heating Solution in the Interlayer can be Completely Removed after Reaction.

▶ High-Torque Digital Agitator System, 50~1000rpm(800rpm/100Lit)

- ***CE Certified*** ■ ***with Certificate & Traceability : Controlled by Serial Number***
- ***Patented Jog-Shuttle Control System*** ■ ***PL (Product Liability) Insurance***
- ***With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.***

∗ Storage Function for the set values : RPM, Timer, and Locking ∗ Chuck - Corrosion Free.

▶ Heavier-work Assembly Frame System

- ***Material : OD Φ27.2×thick 1.5/2.0mm Stainless-steel Pipe and AL-Profile 4040***

∗ Assembly Construction System : Fully Adjustable ∗ Frames according to the Vessel Volumes.
∗ with 4 Castors including 2 Lockable Castors. ∗ 80 / 100Lit : OD Φ27.2×thick 2.0mm STS Pipe

Specification of (A) Reactor Set

Models		"REA-5A"	"REA-10A"	"REA-20A"	"REA-30A"	"REA-50A"	"REA-80A"	"REA-100A"
Jacket Vessel Volume		5 Lit	10 Lit	20 Lit	30 Lit	50 Lit	80 Lit	100 Lit
Jacket Volume Approx.		1.2 Lit	2.6 Lit	5 Lit	8 Lit	12 Lit	20 Lit	25 Lit
Vessel OD×h mm		215×370	250×480	300×630	365×710	410×800	460×970	500×970
Inner Vessel OD mm		185	215	250	330	365	410	460
Heat Hose Connector		GL25	GL32	GL32	① od 35×id 18mm Flat Flange & Metal Clamp			
Drain Tube Size		Glass Tube : od 24×id 19mm			Glass Tube : od 34×id 20mm			
Digital Stirrer (Agitator)	Model, Control	Direct Controlled "SHT-50DX"				Remote Controlled "SHT-120T"		"SHT-140T"
	Viscosity & Torque	100,000 mPas				150,000 mPas		160,000mPas
		300 Ncm				500 Ncm		550 Ncm
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control						50~800 rpm
	Motor & Rating	Worm-Geared DC Motor (3.5:1 Ratio)						
		In·Output 83 / 75 W, 1 / 10 HP				In·Output 130 / 120 W, 1 / 6 HP		
Lifting	Speed	1~53 rpm, 15 Step Control						
	Height	200~500mm Distance Control						
Tilt Angle		Manual 30 Degree						
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end						
Display		Digital LCD with Back-Light Function						
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)						
Shaft / Impeller		Φ14mm PTFE Encapsulated Stainless-steel, Exposed End Φ12mm, up to 50 Lit.						
Safety Device		Overload & Heat Protector for Motor						
Power Consumption		175 W				300 W		
Dimension Overall		800×620×h1900		915×670×h2100		1000×720 ×h2400		1200×790×h2445
Power Supply		1 Phase, AC 230 V, 50 / 60 Hz						

Ordering for (A) Reactor Set, without Circulator & Vacu-Pump

Lifting Reactor Model & Volume	Stirrer Torque and DN-Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 6 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-5A", 5 / 0.1Lit	300Ncm, DN 150	SL.Rea2531		SL.Rea2541	
"REA-10A", 10 / 0.2Lit	〃 , 〃	SL.Rea2532		SL.Rea2542	
"REA-20A", 20 / 0.4Lit	〃 , 〃	SL.Rea2533		SL.Rea2543	
"REA-30A", 30 / 0.5Lit	〃 , 〃	SL.Rea2534		SL.Rea2544	
"REA-50A", 50 / 1Lit	500Ncm, DN 200	SL.Rea2535		SL.Rea2545	
"REA-80A", 80 / 1Lit	〃 , 〃	SL.Rea2536		SL.Rea2546	
"REA-100A", 100 / 1Lit	〃 , 〃	SL.Rea2537		SL.Rea2547	

※ **Note! DN 150 Flanged PTFE Lid ; 5 Neck for 5Lit Vessel**

※ Note!
- ▶ (B) & (C) Heat/Cool Circulator and Heat Transfer Fluid : See the "Heating Circulator" Section.
- ▶ (D) Vacuum Pump : See the "Pump" Section.
- ▶ (E) PTFE Thermo-Probe "K-type" : See the "Measuring, Thermometer" Section.

LaboRactor™ 5~100 Lit Classic Vacuum Reactor Set, with Jacketed Glass Vessel · Agitator · Frame · Glass Assembly

With DN O-ring Flange / PTFE-Impeller & -Drainvalve, Digital 50~1000rpm, 5~100 Lit 자켓 글라스 진공 반응조 셋트

(1) Glass Lid
With 5 Joint

(2) All PTFE Lid
With 6 Screwjoint
◎ Top Safety : Non-Breakage, Anti-Chemical, & +280℃

Heavy-work Support Frame dimension

Φ27.2×thick 1.5mm STS Pipe

5 & 10 Lit : 45×45×h130cm | 50 & 80 Lit : 60×60×h180cm
20 & 30 Lit : 55×55×h170cm | 100 Lit : 67×67×h200cm

▶ Graduated Double-wall Vacuum Glass Vessel, 5~100Lit

- ■ *45° DN Flange & 5mm Thick High Boro-glass 3.3 with Good Physical, Chemical Properties.*
- ■ *PTFE Lid ; -80℃ ~ +260℃* ■ *PTFE Drain Valve ; Aperture Φ25mm, No-Dead Space*
- ■ *Can be Used Direct Contact Thermo-Probe "K-type"*
- ∗ Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.
- ∗ Cooling and Heating Solution in the Interlayer can be Completely Removed after Reaction.

▶ High-Torque Digital Agitator System, 50~1000rpm(800rpm/100Lit)

- ■ *CE Certified* ■ *with Certificate & Traceability : Controlled by Serial Number*
- ■ *Patented Jog-Shuttle Control System* ■ *PL(Product Liability) Insurance*
- ■ *With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.*
- ∗ Digital LCD with Back-Light Function. ∗ Smooth Start and Change of the Stirring Speed.
- ∗ Storage Function for the set values : RPM and Timer ∗ Chuck - Corrosion Free.
- ∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

▶ Heavier-work Assembly Frame System ; Fully Adjustable

- ■ *Material : OD Φ27.2×thick 1.5/2.0mm Stainless-steel Pipe*
- ∗ with 4 Castors including 2 Lockable Castors. ∗ 80 / 100Lit : OD Φ27.2×thick 2.0mm STS Pipe

Specification of (A) Reactor Set

Models		"REA-5C"	"REA-10C"	"REA-20C"	"REA-30C"	"REA-50C"	"REA-80C"	"REA-100C"
Jacket Vessel Volume		5 Lit	10 Lit	20 Lit	30 Lit	50 Lit	80 Lit	100 Lit
Jacket Volume Approx.		1.2 Lit	2.6 Lit	5 Lit	8 Lit	12 Lit	20 Lit	25 Lit
Vessel OD×h mm		215×370	250×480	300×630	365×710	410×800	460×970	500×970
Inner Vessel OD mm		185	215	250	330	365	410	460
Heat Hose Connector		GL25	GL32	GL32	① od 35×id 18mm Flat Flange & Metal Clamp			
Drain Tube Size		Glass Tube : od 24×id 19mm			Glass Tube : od 34×id 20mm			
Digital Stirrer (Agitator)	Model, Control	Direct Controlled				Remote Controlled		
		"SHT-50DX"				"SHT-120T"		"SHT-140T"
	Viscosity & Torque	100,000 mPas				150,000 mPas		160,000mPas
		300 Ncm				500 Ncm		550 Ncm
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control						50~800 rpm
	Motor & Rating	Worm-Geared DC Motor (3.5:1 Ratio)						
		In·Output 83 / 75 W, 1 / 10 HP				In·Output 130 / 120 W, 1 / 6 HP		
	Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end						
	Display	Digital LCD with Back-Light Function						
	Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)						
Shaft / Impeller		Φ10/8 PTFE Encapsulated Stainless-steel Shaft				Φ12/10 PTFE Encapsulated Stainless-steel Shaft		
Safety Device		Overload & Heat Protector for Motor						
Power Consumption		85 W				120 W		
Dimension Overall		45×45×h130cm		55×55×h170cm		60×60×h180cm		67×67×h200
Power Supply		1 Phase, AC 230 V, 50 / 60 Hz						

Ordering for (A) Reactor Set, without Circulator & Vacu-Pump

Classic Reactor Model & Volume	Stirrer Torque and DN-Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 6 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-5C", 5 / 0.1Lit	300Ncm, DN 150	SL.Rea2511		SL.Rea2521	
"REA-10C", 10 / 0.2Lit	〃 , DN 200	SL.Rea2512		SL.Rea2522	
"REA-20C", 20 / 0.4Lit	〃 , 〃	SL.Rea2513		SL.Rea2523	
"REA-30C", 30 / 0.5Lit	〃 , 〃	SL.Rea2514		SL.Rea2524	
"REA-50C", 50 / 1Lit	500Ncm, DN 200	SL.Rea2515		SL.Rea2525	
"REA-80C", 80 / 1Lit	〃 , 〃	SL.Rea2516		SL.Rea2526	
"REA-100C", 100 / 1Lit	〃 , 〃	SL.Rea2517		SL.Rea2527	

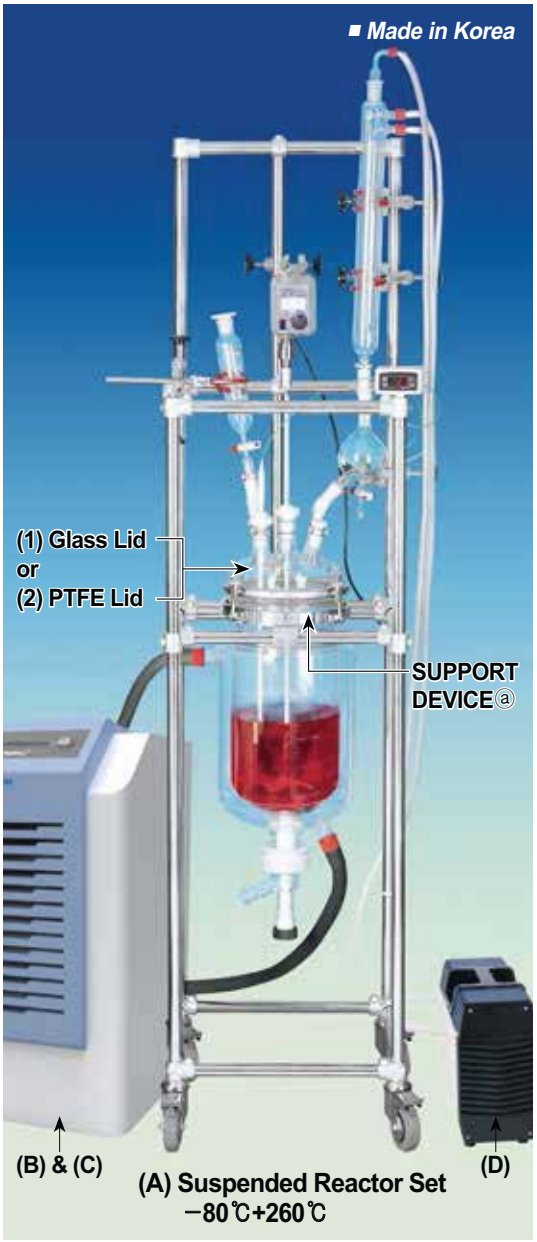
※ **Note! DN 150 Flanged PTFE Lid ; 5 Neck for 5Lit Vessel**

※ Note!

- ▶ (B) & (C) Heat/Cool Circulator and Heat Transfer Fluid : See the "Heating Circulator" Section.
- ▶ (D) Vacuum Pump : See the "Pump" Section.
- ▶ (E) PTFE Thermo-Probe "K-type" : See the "Measuring, Thermometer" Section.

LaboRactor™ 0.5~20 Lit Suspended Vacuum Reactor Set, with Jacketed Glass Vessel · Agitator · Frame · Glass Assembly

With DN O-ring Flange / PTFE-Impeller & -Drainvalve, Digital 50~1000rpm, 행잉 타입 자켓 글라스 진공 반응조 셋트 0.5~20 Lit



▶ Easy Installation & Remove, and Safety

▶ 0.5~20Lit Graduated Double-wall Vacuum Glass Vessel

■ 45° DN Flange & 5mm Thick High Boro-glass 3.3 with Good Physical, Chemical Properties.

■ PTFE Lid ; -80℃ ~ +260℃. ***■ PTFE Drain Valve ; No-Dead Space.***

■ Can be Used Direct Contact Thermo-Probe "K-type"

∗ Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.

∗ Cooling and Heating Solution in the Interlayer can be Completely Removed after Reaction.

▶ High-Torque Digital Agitator System, 50~1000rpm

■ CE Certified. ***■ with Certificate & Traceability : Controlled by Serial Number.***

■ Patented Jog-Shuttle Control System. ***■ PL (Product Liability) Insurance***

■ With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.

∗ Digital LCD with Back-Light Function. ∗ Smooth Start and Change of the Stirring Speed.

∗ Storage Function for the set values : RPM and Timer. ∗ Chuck - Corrosion Free.

∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

▶ Heavier-work Assembly Frame System ; Fully Adjustable

■ Material : OD ⌀27.2×thick 1.5mm Stainless-steel Pipe.

■ With Heavy-duty Aluminium VESSEL SUSPENSION SUPPORT DEVICE ⓐ ; Very Easy Vessel Exchange!

■ With Heavy-duty Stainless-steel SUPPORT Guide ⓑ for the Bottom of 10 & 20Lit Vessels.

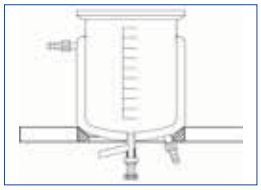
∗ with 4 Castors including 2 Lockable Castors. ∗ Benchtop Frame(With Feet) Available.

Specification of (A) Reactor Set

Models		"REA-S0.5"	"REA-S1"	"REA-S2"	"REA-S3"	"REA-S5"	"REA-S10"	"REA-S20"
Jacket Vessel Volume		0.5Lit	1Lit	2Lit	3Lit	5Lit	10Lit	20Lit
Jacket Volume Approx.		0.2Lit	0.4Lit	0.8Lit	1.1Lit	1.2Lit	2.6Lit	5Lit
Vessel OD×h mm		130×140	130×210	160×250	160×340	215×370	250×480	300×630
Inner Vessel OD mm		105	105	130	130	185	215	250
Heat Hose Connector		GL18			GL25		GL32	
Drain Tube Size		od 15×id 10mm		od 18×id 13mm		od 24×id 19mm		
Digital Stirrer (Agitator)	Model, Control	Direct Controlled "SHT-50DX"						
	Viscosity & Torque	100,000 mPas / 300 Ncm						
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control						
	Motor & Rating	Worm-Geared DC Motor (3.5:1 Ratio)						
		In·Output 83 / 75 W, 1 / 10 HP						
	Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end						
	Display	Digital LCD with Back-Light Function						
	Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)						
Shaft / Impeller		⌀8/6 PTFE Encapsulated Stainless-steel Shaft			⌀10/8 PTFE Encapsulated Stainless-steel Shaft			
Safety Device		Overload & Heat Protector for Motor						
Power Consumption		85 W						
Dimension Overall		45×45×h75cm		45×45×h130cm		50×50×h150cm		55×55×h170
Power Supply		1 Phase, AC 230 V, 50 / 60 Hz						

(1) Glass Lid
With 5 Joint

(2) All PTFE Lid
With 6 Screwjoint
◎ Top Safety : Non-Breakage, Anti-Chemical, & +280℃



Support Guide ⓑ for 10 & 20 Lit

Ordering for Suspended Reactor Set, without Circulator & Vacu-Pump

Suspen-Reactor Model & Volume	Stirrer Torque and DN-Flange	(1) with Glass Lid, 5-Neck		(2) with PTFE Lid, 5-Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-S0.5", 0.5 / 0.1Lit	300Ncm, DN 100	SL.Rea2481		SL.Rea2491	
"REA-S1", 1 / 0.1Lit	〃 , 〃	SL.Rea2482		SL.Rea2492	
"REA-S2", 2 / 0.2Lit	〃 , DN 120	SL.Rea2483		SL.Rea2493	
"REA-S3", 3 / 0.5Lit	〃 , 〃	SL.Rea2484		SL.Rea2494	
"REA-S5", 5 / 0.5Lit	〃 , DN 150	SL.Rea2485		SL.Rea2495	
"REA-S10", 10 / 1Lit	〃 , DN 200	SL.Rea2486		SL.Rea2496	
"REA-S20", 20 / 1Lit	〃 , 〃	SL.Rea2487		SL.Rea2497	

※ **Note! DN 200 Flanged PTFE Lid ; 6-Neck for 10 & 20 Lit Vessel**

※ Note!

▶ (B) & (C) Heat/Cool Circulator and Heat Transfer Fluid : See the "Heating Circulator" Section.

▶ (D) Vacuum Pump : See the "Pump" Section.

▶ (E) PTFE Thermo-Probe "K-type" : See the "Measuring, Thermometer" Section.

LaboRactor™ 2~50 Lit Mantle-Heated Reactor Set, with (1) Single-wall Glass Vessel "Kettle" or (2) Round Flask With DN Series O-ring Flange / PTFE-Impeller & -Drainvalve, Digital 50~1000rpm, 맨틀가열형 진공반응조 셋트, 케틀 & 환형

Ⅰ. M-Model Kettle-type

Ⅱ. MR-Model R.Flask-type

■ *Made in Korea*

With Mantle Remote Controller

Mantle Heated Reactor Set, with (Ⅰ) "Kettle" Vessel or (Ⅱ) Round Flask

(1) Glass Lid
With 5 Joint

(2) All PTFE Lid
With 6 Screwjoint
◎ Top Safety : Non-Breakage, Anti-Chemical, & 280℃

(E) Option ; PTFE Thermo-Probe "K-type"
⇒ See the "Measuring, Thermometer" Section

▶ DURAN-glass Single-wall Vacuum Glass Vessel

- ■ *Ideal for Lab, Pilot- & Mass-Production* ■ *-80℃ ~ +260℃ Withstand.*
- ■ *Can be Used Direct Contact Thermo-Probe "K-type"*
- ■ *Single-wall Vacuum Glass Reaction Vessel System with DN Grooved Flange.*
- ■ *5mm Thick High Borosilicate Glass 3.3 with Good Physical, Chemical Properties.*

∗ Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.

▶ Remote-controlled Heating Mantle & Upper Cover, 450℃

- ■ *With Digital Feedback Controller "WGD-30S" : Can be used PTFE External Direct Contact Thermo-Probe "K-type" (E) - Option.*
- ■ *(B) Fabric-housed Mantle Cover Available - Option* ※ Details ⇒ See the Mantle-Section!

▶ High-Torque Digital Agitator System, 50~1000rpm

- ■ *CE Certified* ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*
- ■ *Patented Jog-Shuttle Control System* ■ *PL (Product Liability) Insurance*
- ■ *With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.*

Models	Ⅰ. Kettle-type	"REA-2M"	"REA-4M"	"REA-6M"	"REA-10M"	"REA-20M"	–
	Ⅱ. R.Flask-type	"REA-2MR"	"REA-3MR"	"REA-5MR"	"REA-10MR"	"REA-20MR"	"REA-50MR"
Vessel Work Volume	M-Model	2Lit	4/5Lit	6/7Lit	10/12Lit	20/21Lit	-
	MR-Model	2Lit	3Lit	5Lit	10Lit	20Lit	50Lit
Vessel od×h mm	M-Model	130×240	200×165	215×165	240×165	250×215	-
	MR-Model	165×215	185×240	225×280	280×350	350×430	480×650
Drain Tube Size		od 13×id 9mm	od 15×id 10mm	od18×id13mm			
Digital Stirrer (Agitator)	Model, Control	Direct Controlled "SHT-50DX"					Remote Cont. SHT-120T
	Viscosity & Torque	100,000 mPas					150,000 mPas
		300 Ncm					500 Ncm
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control					
	Motor & Rating	Worm-Geared DC Motor (3.5:1 Ratio)					
		In·Output 83 / 75 W, 1 / 10 HP					130/120 W, 1 / 6 HP
	Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end					
	Display	Digital LCD with Back-Light Function					
	Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)					
Heating Mantle		▶ See the Mantle-Section					
Shaft / Impeller		Φ8/6 PTFE Encapsulated Stainless-steel Shaft		Φ10/8 PTFE Encapsulated Stainless-steel Shaft			Φ12/10 PTFE Shaft
Safety Device		Overload & Heat Protector for Motor					
Power Consumption		635W	885W	935W	1485W	2085W	4120W
Power Supply		1 Phase, AC 230 V, 50 / 60 Hz					

Ⅰ. M-model With 2~20Lit Single-Wall Vessel "Kettle-type", with PTFE Drain Valve

Mantle-heated Reactor Model & Volume	Mantle watts(W) and DN Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 5 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-2M", 2Lit	550W, DN100	SL.Rea2553		SL.Rea2563	
"REA-4M", 4 / 5Lit	800W, DN150	SL.Rea2554		SL.Rea2564	
"REA-6M", 6 / 7Lit	〃 , 〃	SL.Rea2555		SL.Rea2565	
"REA-10M", 10 / 12Lit	1400W, 〃	SL.Rea2556		SL.Rea2566	
"REA-20M", 20 / 22Lit	2000W, DN200	SL.Rea2557		SL.Rea2567	

∗ PTFE DN 200 Flanged Lid : 6-neck for 20Lit vessel

Ⅱ. MR-model With 2~50Lit Round Bottom Flask, with PTFE Drain Valve

Mantle-heated Reactor Model & Volume	Mantle watts(W) and DN Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 5 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-2MR", 2Lit	450W, DN100	SL.Rea2573		SL.Rea2583	
"REA-3MR", 3Lit	750W, DN120	SL.Rea2574		SL.Rea2584	
"REA-5MR", 5Lit	850W, 〃	SL.Rea2575		SL.Rea2585	
"REA-10MR", 10Lit	1500W, DN150	SL.Rea2576		SL.Rea2586	
"REA-20MR", 20Lit	2000W, 〃	SL.Rea2577		SL.Rea2587	
"REA-50MR", 50Lit	4000W, DN200	SL.Rea2578		SL.Rea2588	

∗ PTFE DN 200 Flanged Lid : 6-neck for 20Lit vessel

DAIHAN Scientific

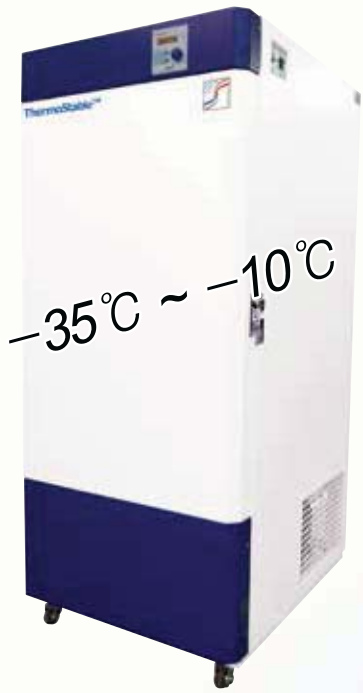
Refrigerator & ULT Freezer

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

0~10℃ Refrigerator, Blood Bank and Pharmaceutical ***New*** P. 187~188
, Laboratory / Cold Lab Chamber ····· P. 189
−35℃ Bio Freezer ····· P. 190
−86℃ ULT Freezer, Personal-type (General & SMART-type) P. 191~192
, Upright-type (SMART-type) ····· P. 193
−95℃ ULT Freezer, Upright-type (SMART-type) ····· P. 194
ULT Freezer Accessory ····· P. 195~196

Blood Bank Refrigerator
"ThermoStable™ BR-300"

ULT Freezer
"DuoFreez™ U800"



Bio Freezer
"ThermoStable™ WLF-420"

ULT Freezer
"UniFreez™ U80"

WiRe™ App Service

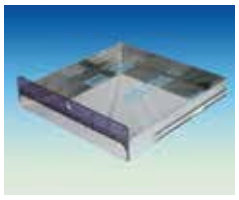
Controlled by Smart-Phone

DAIHAN® 105 & 295 Lit Blood Bank & Pharmaceutical Refrigerator "BR & PR", 2~10℃, Class-I & II Medical Device NEW

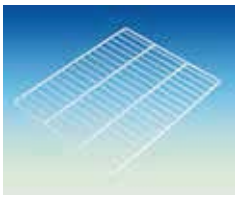
With Microprocessor PID Controller, 60mm(t) Polyurethane Insulation, Vacuum Sealed Glass Door, CFC/HCFC-Free, Forced Air Circulation Drawer or Wire Shelf, Superior Temp Uniformity, **혈액보관용 & 시약약품보관용 냉장고**

A. 295Lit Blood Bank Refrigerator "BR-300"

B. 105Lit Pharmaceutical Refrigerator "PR-100"



(1) STS Drawer Shelf



(2) Teflon-coated Wire Shelf

(4) Temp Chart Recorder

(5) Thermal Printer

■ ***Made in Korea*** ■ ***PL(Product Liability)***

■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

* Energy Saving LED Lamp Installation
* High Density Polyurethane Insulation(60mm thick) Provides Excellent Low Temperature
* Invisible Heating Film Protects from water Condensation on the Glass Door
* Self-Diagnostic and Visual & Audible Alarm System :
  - High/Low Working Room Temp Alarm
  - Electric Power Failure Alarm
  - Status of Door Opening Warning Alarm
  - Low Battery for Controller Warning Alarm
  - Password Locking System for Set Temp

Specifications & Ordering information

Spec. \ Model		A. Blood Bank Refrigerator		B. Pharmaceutical Refrigerator	
		"BR-100" 105 Lit, Bench Top	"BR-300" 295 Lit, Floor Standing	"PR-100" 105 Lit, Bench Top	"PR-300" 295 Lit, Floor Standing
Medical Device		NIDS Class-II		NIDS Class-I	
Temp Range		2 ~ 10°C			
Shelf (Included)		1 Basket & 2 Drawer Shelf	3 Drawer Shelf	1 Basket & 2 Wire Shelf	3 Wire Shelf
Compressor		1 / 8 HP	1 / 4 HP	1 / 8 HP	1 / 4 HP
Recorder		Built-in Thermal "STEA1005"	Built-in Temp Chart "STEA1001"	Option	
Defrost Heater		300 W, Automatic Defrost and Dehumidify System			
Forced Air Circulation		Turbo Fan with Automatic Stop During Door Open			
Controller & Display		Microprocessor Digital Controller / 4 Digit LED Display			
Door		Outer Door with Glass Window with Safety Door Lock System			
Safety		High / Low Temp Alarm, Electric Current Leakage Breaker			
Material		Internal : Stainless-steel, External : Epoxy Powder Coated-steel			
Dimension (w×d×h), (mm)	**Interior**	465×420×h630	560×660×h800	465×420×h630	560×660×h800
	Exterior	560×640×h900	685×865×h1490	560×640×h900	685×865×h1490
	Packing	720×630×h1050	850×720× h1860	720×630×h1050	850×720×h1860
Net & Gross Weight		65 & 80 kg	170 & 185 kg	65 & 80 kg	170 & 185 kg
Power Consumption		100 W	195 W	100 W	195 W
Electric Reqts.		110V, 60Hz or 220V, 50/60Hz, 1 Phase			
Cat. No.	**220V**	**DH.RefB0100**	**DH.RefB0300**	**DH.RefP0100**	**DH.RefP0300**
	110V	**DH.RefB0101**	**DH.RefB0301**	**DH.RefP0101**	**DH.RefP0301**
Price, Each. ₩					

* **Other Specifications are available upon Customer's Request.** ※ **운임 별도!**

Spare STS Drawer Shelf or Teflon-coated Steel Wire Shelf & Basket

Ea. Price, ₩

DH.RefA0001 (1) STS Drawer Shelf, w415×d340 mm, for **"BR-100"**
DH.RefA0002 , w520×d560 mm, for **"BR-300"**
DH.RefA0005 (2) Teflon-coated Wire Shelf, w440×d350 mm, for **"PR-100"**
DH.RefA0006 , w590×d470 mm, for **"PR-300"**
DH.RefA0003 (3) Teflon-coated Wire Basket, w440×d340×h175 mm, for **"BR-100"**, **"PR-100"**

Optional Accessory

Ea. Price, ₩

DH.SteA1001 (4) Temp Chart Recorder, **"STEA1001"**, with **"STEA1002"** Chart Paper for **"PR-300"**
DH.SteA1002 Chart Paper, **"STEA1002"**, 52 Chart, for 7 day Recording
DH.SteA1003 Replacement Pen, **"STEA1003"**, 6ea Red Color, for **"STEA1001"**
DH.SteA1005 (5) Thermal Printer, Paper Roll, **"STEA1005"**
DH.SteA1006 Thermal Paper Package, 4 Paper Roll, for **"STEA1005"** for **"PR"**&**"BR"**
DH.SteA1010 Mobile Alarm System, **"STEA-Mobile"**

Refrigerator with Validation (IQ, OQ) Service

Ea. Price, ₩

DH.RefB5100 Validation Service(IQ, OQ), with **"BR-100"**
DH.RefB5300 , with **"BR-300"**
DH.RefP5100 , with **"PR-100"**
DH.RefP5300 , with **"PR-300"**

"ThermoStable™ BR & PR" Blood Bank & Pharmaceutical Refrigerator, 620 & 1140 Lit, Class-Ⅰ & Ⅱ Medical Device(NIDS)

With PID Controller, Chart Recorder, Door Lock System, Drawer or Wire Shelf, GMP Certi, 0℃~10℃, **혈액보관/시약약품 보관용 냉장고**

(1) 620 Lit Blood Bank Refrigerator "BR-600"

(2) 1140Lit Pharmaceutical Refrigerator "PR-1000"

(a) Included Perforated Drawer Shelf

(b) Teflon-coated Steel Wire Shelf

- ***Made in Korea*** ■ ***CE, GMP Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Superior Temperature Uniformity and Quick Recovery by Forced Air Refrigeration System***
- ***CFC-Free Refrigeration System***
- ***Automatic Defrost System***

* Intelligent Control of Refrigerator for Preventing Overload of Compressor
* Double Fold Tempered Glass Window
* Built in Battery for Power Failure Alarm
* Alarm Set Points of Temperature Deviation at +5.5 and -1.5 Under Temperature
* Automatic Condensate Removal, No Drain Line Required
* Available Built in Chart Recorder and Remote Alarm System(Optional)

Specifications & Ordering information

Spec. \ Model		(1) Blood Bank Refrigerator Drawer-type Shelf		(2) Pharmaceutical Refrigerator Wire Shelf	
		"BR-600" Max. Capa. 620L	"BR-1000" Max. Capa. 1140L	"PR-600" Max. Capa. 620L	"PR-1000" Max. Capa. 1140L
Capacity		620 Lit	1,140Lit	620 Lit	1,140Lit
Medical Device		NIDS Class-Ⅱ		NIDS Class-Ⅰ	
Temp. Range		0℃~+10.0℃, at Room Temperature of 30℃ and Humidity of 70%			
Temp. Resolution and Sensor		1℃-Display, 1℃-Control, PT100 Sensor			
Refrigerant		CFC-Free(R-134A) Refrigeration System			
Compressor		1/3 HP			
Evaporator		Auto Exchange Dual Evaporator			
Air Circulation		Dual Turbo Fan Forced-air Type			
Defrost		Automatic Defrost System			
Controller & Display		Digital PIDcontroller, LCD Display			
Door		Outer Door with Glass Window with Safety Door Lock System			
Shelf (Included)		6 Drawer Shelf	12 Drawer Shelf	5 Wire Shelf	10 Wire Shelf
Recorder		Included Chart Recorder			
Others		with Door Lock Device, Over Current- & Temp. Protection, Sensor Error Detection			
Material		Internal : Stainless-steel, External : Powder Coated-steel			
Dimension (w×d×h)	**Internal(mm)**	620×700×1,430	1,140×700×1,430	620×700×1,430	1,140×700×1,430
	External(mm)	740×805×1,930	1,260×805×1,930	740×805×1,930	1,260×805×1,930
Net Weight		134 kg	208 kg	134 kg	208 kg
Power Consumption		650 W	750 W	650 W	750 W
Electrical Reqts.		1 Phase, AC120V, 60Hz or AC230V, 50/60Hz			
Cat. No.	**230V**	**DH.RefB0600**	**DH.RefB1000**	**DH.RefP0600**	**DH.RefP1000**
	120V	**DH.RefB0601**	**DH.RefB1001**	**DH.RefP0601**	**DH.RefP1001**
Price, Each. ₩					

*** Other Specifications are available upon Customer's Request.**

※ 운임 약 ₩ 95,000 별도!

Spare Perforated Drawer Shelf or Teflon-coated Steel Wire Shelf

		Ea. Price, ₩
DH.RefA0007	(a) Perforated Drawer Shelf, Stainless-steel, w570×d570 mm, for **"BR-600"**	
DH.RefA0008	(a) Perforated Drawer Shelf, Stainless-steel, w470×d570 mm, for **"BR-1000"**	
DH.RefA0003	(b) Wire Shelf, Teflon-coated Steel, w600×d624 mm, for **"PR-600"**	
DH.RefA0004	(b) Wire Shelf, Teflon-coated Steel, w560×d624 mm, for **"PR-1000"**	

"ThermoStable™ LR" Smart Laboratory Refrigerator, Automatic Defrost System, 0℃~10℃, 620- & 1140-Lit

With Smart-Lab™ System, Teflon-coated Steel Wire Shelf, CFC-Free, Door Lock Device, **실험실용 다용도 냉장고**

(1) 620 Lit Laboratory Refrigerator "LR-600"

(2) 1140Lit Laboratory Refrigerator "LR-1000"

(a) Teflon-coated Steel Wire Shelf

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Superior Temperature Uniformity and Quick Recovery by Forced Air Refrigeration System***
- ■ ***CFC-Free Refrigeration System*** ■ ***Automatic Defrost System***
- ■ ***Smart-Lab™ Controller***
  - Ergonomic 7″ Full Touch Screen TFT LCD(Smart-Lab™ Controller)
  - WiRe™ App Service. - Internet Connectivity with WiFi
  - Self-Diagnostic Function - Automatic Data Recording
  - Push Alarm Service to Smart Phone : Power- / Temperature- / Door Open-Error Status
  - Built in USB port for Data Download and Program Upgrade
  - Password Protected Setting - Interactive Temperature Graph
  - Digital Calibration(Offset Function) - Min-/Max-Temperature
- ∗ Intelligent Control of Refrigerator for Preventing Overload of Compressor
- ∗ Double Fold Tempered Glass Window ∗ Built in Battery for Power Failure Alarm
- ∗ Alarm Set Points of Temperature Deviation at +5.5 and -1.5 Under Temperature
- ∗ Automatic Condensate Removal, No Drain Line Required
- ∗ Available Built in Chart Recorder and Remote Alarm System(Optional)

Specifications & Ordering information

Spec. \ Model		SMART Laboratory Refrigerator Teflon-coated Steel Wire Shelf	
		"LR-600" Max. Capa. 620 Lit	"LR-1000" Max. Capa. 1140 Lit
Capacity & Doors		620 Lit, 1-Door	1,140Lit, 2-Doors
Temp. Range		0℃~+10.0℃ (PT100 Sensor)at R/T of 30℃ and Humidity of 70%	
Temp. Resolution		1℃-Display, 1℃-Control	
Refrigerant		CFC-Free(R-134A) Refrigeration System	
Compressor & Evaporator		1/3 HP, Auto Exchange Dual Evaporator	
Air Circulation		Dual Turbo Fan Forced-air Type	
Defrost & Circulation		Automatic Defrost System, Dual Turbo Fan	
Controller & Display		Smart-Lab Controller, 7″ Full Touch Screen TFT LCD, WiReTM App Service	
Door		Outer Door with Glass Window	
Shelf (Included)		5 Teflon-coated Steel Wire Shelf	10 Teflon-coated Steel Wire Shelf
Others		with Door Lock Device, Over Current- & Temp, Over Current Protection, Sensor Error Detection	
Material		Internal : Stainless-steel, External : Powder Coated-steel	
Dimension (w×d×h)	Internal(mm)	620×700×1,430	1,140×700×1,430
	External(mm)	740×805×1,930	1,260×805×1,930
Net Weight		134 kg	208 kg
Power Consumption		650 W	750 W
Electrical Reqts.		1 Phase, AC120V, 60Hz or AC230V, 50/60Hz	
Cat. No.	230V	DH.RefL0600	DH.RefL1000
	120V	DH.RefL0601	DH.RefL1001
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

※ **운임 약 ₩ 95,000 별도!**

Spare Teflon-coated Steel Wire Shelf

		Ea. Price, ₩
DH.RefA0003	(a) Wire Shelf, Teflon-coated Steel, w600×d624 mm, for **"LR-600"**	
DH.RefA0004	(a) , w560×d624 mm, for **"LR-1000"**	

>> WiRe™ App Service

7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

Controlled by Smart-Phone

"ThermoStable™ WLF" Digital Bio Freezer, −35℃~−10℃, 320 · 420 · 620Lit

With 3 Shelf, Digital Fuzzy Control System, Fast Freezing Function, CFC-Free Refrigeration, Certi. & Traceability

디지털 저온 냉동고, 디지털 퍼지 컨트롤, 친환경 냉매(134A) 채용, 급속 냉동 기능

Digital Bio Freezer "ThermoStable™ WLF"

with Inner Doors "ThermoStable™ WLF"

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Digital Fuzzy Control System Implementing Superior Temperature Accuracy***
- ***Fast Freezing Function***
- ***Patented Jog-Shuttle Control System***
- ***CFC-Free (134A) Refrigeration System***

∗ Suitable for Storage of Bio Reagent, Seed, Enzyme and Various Samples
∗ Digital Fuzzy Control System Implementing Superior Temperature Accuracy
∗ Storage Function : Set Values of Temperature and Timer
∗ Digital LCD with Back-Light Function
∗ Locking Mode supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
∗ Intelligent Control of Refrigerator for Preventing Overload of Compressor
∗ Corrosion Resistant 304 Stainless-steel Chamber and Shelves
∗ Over Current Protection, Sensor Error Detection, Leakage Breaking

Specifications & Ordering information

Spec. \ Model	"WLF-320" Max. Capa. 330 Lit	"WLF-420" Max. Capa. 420 Lit	"WLF-620" Max. Capa. 600 Lit
Capacity	330 Lit	420 Lit	600 Lit
Type	Upright Type		
Temp. Range & Sensor	−35℃~−10℃, PT100		
Temp. Resolution	1℃-Display, 1℃-Control		
Refrigerant & Compressor	CFC-Free(134A) Refrigeration System, 3/4HP	CFC-Free(134A) Refrigeration System, 1HP	
Display	Digital LCD with Back-Light Function		
Controller	Digital Controller with Jog-Shuttle Switch (Turn+Push)		
Shelf (Included)	3 Stainless-steel Shelf(#304)		
Safety Device	Over Current Protector, Sensor Error Detector, Leakage Breaker		
Material	Stainless-steel (#304)-Internal, Powder Coated steel-External		
Dimension : Interior & Exterior	600×550×h1,000mm, 820×700×h1,700mm	600×700×h1,000mm, 820×850×h1,700mm	780×800×h1,000mm, 1000×950×h1,700mm
Packing Size & Gross Weight	1,160×910×h2,160mm 290 kg	1,160×1,060×h2,160mm 314 kg	1,340×1,160×h2,160mm 350 kg
Power Consumption	1.7 kW	1.8 kW	1.8 kW
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No. 230V	**DH.WLF00320**	**DH.WLF00420**	**DH.WLF00620**
Cat. No. 120V	**DH.WLF01320**	**DH.WLF01420**	**DH.WLF01620**
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**

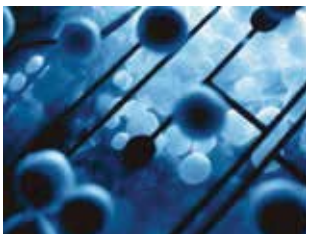
※ 운임 약 ₩ 55,000 별도!

Spare Stainless-steel Flat Shelf

		Ea. Price, ₩
DH.WLF10320	Flat Shelf, w580×d530mm, **"LFS320"**, for **"WLF-320"**	
DH.WLF10420	, w580×d680mm, **"LFS420"**, for **"WLF-420"**	
DH.WLF10620	, w760×d780mm, **"LFS620"**, for **"WLF-620"**	

DAIHAN Ultra-Low-Temperature Freezer

Simple, Efficient and Green - UniFreez™
Double Security and Power - DuoFreez™



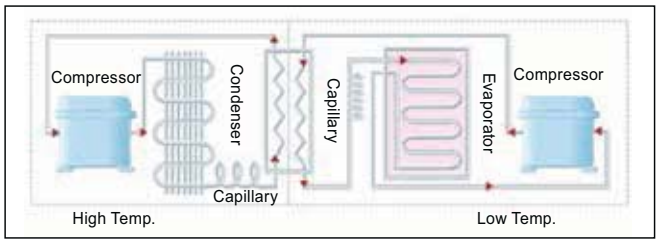
Innovation of Freezing System

I. UniFreez™ Simplified Hi-Efficiency Freezing System

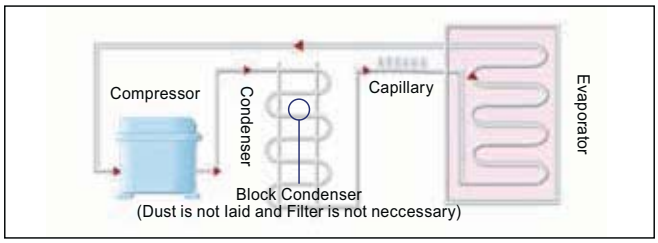
Most of the Ultra-Low Temperature Freezers has two compressors cooperating with each other to drop the internal temperature down to -86℃ as shown in the following figure and its overall freezing mechanism is very complicated.

However, our new **UniFreez™** uses only single compressor. Even though, single set of a compressor, a capillary tube, a condenser and an evaporator is incorporated, it ensures the temperature down to -86℃ by an advanced control technology of the compressor and the process of specially mixed refrigerants. **UniFreez™** overcomes technical complexity of the typical cascaded double compressor system. Simplification of the freezing mechanism and electricity minimizes the noise, power consumption and failure of operation.

High-Efficiency ! User Safety ! Energy Saving ! Long Life time !



Typical Cascaded Compressor System
Two Freezing cycles contribute Complicated mechanism

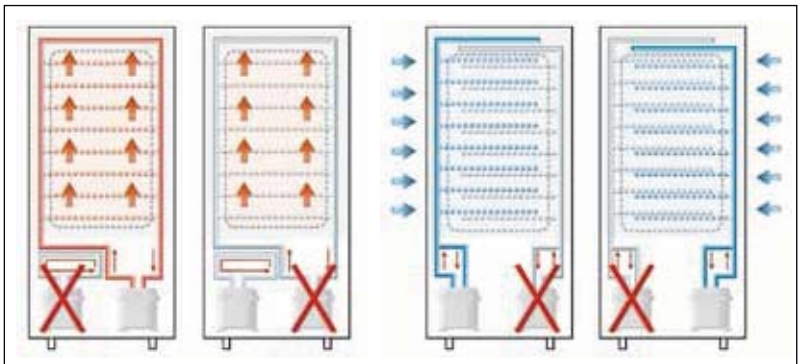


New **UniFreez™ System**
Single freezing cycle works only!!

II. DuoFreez™ Double Security & Robustness Freezing System

We offer an extraordinary high-stability system powered by two **UniFreez™ System** operating independently. Normally, both of the two compressors are running, and it drops the temperature inside the storage chamber down to -95°C. Even if one **UniFreez™ System** fails in operation by a certain unexpected problem, the other **UniFreez™ System** still works and maintains ultra-low temperature down to -80°C. It means one **UniFreez™ System** works as a 'backup'of the other **UniFreez™ System** This innovative mechanism realizes doubled stability, robustness and fault tolerance, which are the most important feature of the ULT freezer needed by all the customers.

- ▶ **The lowest temperature of −95℃ is ensured by DuoFreez™ system running independently and simultaneously**
- ▶ **Fault Tolerance System**
  - Realization of doubled stability and robustness
- ▶ **Incomparable Fast and Powerful Freezing**
  - Fast Recovery of Target Temperature



(1) Typical Cascaded Compressor

(2) DuoFreez™ System

(1) Complicated mechanism
⇒ If one of compressor fails, temperature would go up

(2) Even if one of the two UniFreez™ systems fails to run, the other one is still running properly ⇒ Minimum − 80℃

"UniFreez™ U25 & 80" Personal Smart-Lab™ ULT Freezer, Class-II Medical Device(NIDS), −86℃~−65℃

Non-Freon Refrigerants, Upright Type, 개인용 초저온 냉동고, 단일 냉각 시스템, 터치 스크린 LCD 컨트롤러, 친환경 냉매 채용

82Lit Personal ULT Freezer "UniFreez™ U80", with Smart-Lab Controller

- ***Made in Korea*** ■ ***UL/CUL Certified & GD mark (Only "U80" model)***
- ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Personal type Compact Ultra Low Temperature Freezer***
- ***"UniFreez™ U" System can freeze down to -86℃ : realize robust and long life time.***
- ***Smart-Lab™ Controller (Only "U80" model)***
  : Remote Controlled by Smart-Phone with WiRe™ App Service
  - Ergonomic 7" Full Touch Screen TFT LCD
  - Easy Monitoring and Control
  - Internet Connectivity with WiFi
  - Storage Management & Automatic Temp. Data Recording
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Functions

∗ Easy Maintenance and Improved Performance
∗ High-quality Insulation Panel and Inner Doors ensure defrosting around outer surface.
∗ Robust & Flexible design of Door Handle
∗ Use of Block Condenser removes filter and causes of related failure.
∗ Filter-free Mechanism lowers heat generated by the compressor
∗ CFC-free Refrigerants are used
∗ External Temp. Sensor Hole
∗ Inner Door Height : 252mm ("UniFreez™ U80")

WiRe™ App Service

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

Controlled by Smart-Phone

25Lit Personal ULT Freezer "UniFreez™ U25", with Digital Feedback Controller

Specifications & Ordering information

Spec. \ Model		"UniFreez™ U25" Max. Capa. 25 Lit	"UniFreez™ U80" Max. Capa. 82 Lit Included 1 Stainless-steel Shelf
Capacity		25 Lit	82 Lit
Temp.	Range	−86℃~−65℃	
		at Room Temperature of 30℃ and Humidity of 70%	
	Sensor	PT100 Sensor	
Compressor		Hermetic Type	
Condenser Type		Block Condenser, No Pin, Filter Free Mechanism	
Refrigerant		Natural (CFC Free Refrigerant System)	
Controller		Digital Feedback Controller	7" Full Touch Screen TFT LCD
Shelf (Included)		None	1 Stainless-steel Shelf
Max. Q'ty of Racks		None, Only 10~15 boxes are applicable	4pcs of 12(4×3)-Placed Rack (RFU5234)
Material	Internal	Stainless-steel (#304)	
	External	Powder Coated steel Plate	
	Inner Door	Powder Coated Stainless-steel (#304)	
Dimension (w×d×h)	Internal (mm)	200×420×300	340×485×520
	External (mm)	390×627×785	530×687×1,060
Weight		52 kg	60 kg
Packing Size (w×d×h) (mm) & Gross Weight		880×860×1,300	960×760×1,350
		69 kg	102 kg
Power Consumption		321 w/h	
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WUF0032	DH.SWUF0075
	120V	-	DH.SWUF0175
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 45,000 별도!

Optional Freezer Racks, Boxes, etc. : Please See 195~196 Page

"UniFreez™ U" Smart-Lab™ ULT Freezer, Class-II Medical Device(NIDS), 4 & 5-Inner Door, −86℃~−65℃

Non-Freon Refrigerants, Auto Vacuum Releasing System, 393 · 503 · 714 · 796 Lit, Wire™ Service, Upright-type

초저온 냉동고, 업라이트형, 단일 냉각 시스템, 터치 스크린 LCD 컨트롤러, 친환경 냉매 채용

SMART Ultra-Low Temperature Freezer, "UniFreez™ U800"

- ■ *Made in Korea*
- ■ *UL/CUL & CE Certified*
- ■ *GD(Good Design)-mark*
- ■ *PL(Product Liability) Insurance*
- ■ *with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System*
- ■ *"UniFreez™ U" System can freeze down to -86℃ : realize robust and long life time.*
- ■ *Smart-Lab™ Controller : Remote Controlled by Smart-Phone with WiRe™ App Service*
  - Ergonomic 7″ Full Touch Screen TFT LCD
  - Easy Monitoring and Control - Eye level Controller
  - Internet Connectivity with WiFi
  - Storage Management & Automatic Temp. Data Recording
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Functions

∗ Easy Maintenance and Improved Performance
∗ High-quality Insulation Panel and Inner Doors ensure defrosting around outer surface.
∗ Automatic Vacuum Breaker - Easy to re-open the Door.
∗ Robust & Flexible design of Door Handle
∗ Use of Block Condenser removes filter and causes of related failure.
∗ Filter-free Mechanism lowers heat generated by the compressor
∗ CFC-free Refrigerants are used
∗ External Temp. Sensor Hole
∗ Inner Door Height : 312mm(4 Door), 252mm(5 Door)
∗ Included Shelves : 3ea.(4 Door), 4ea.(5 Door)

Specifications & Ordering information

Spec. \ Model			"UniFreez U400" 4 & 5 Door Max. Capa. 393L	"UniFreez U500" 4 & 5 Door Max. Capa. 503L	"UniFreez U700" 4 & 5 Door Max. Capa. 714L	"UniFreez U800" 4 & 5 Door Max. Capa. 796L
Capacity			393 Lit	503 Lit	714 Lit	796 Lit
Temp.	Range		−86℃~−65℃		−80℃~−65℃	
			at Room Temperature of 30℃ and Humidity of 70%			
	Sensor		PT100 Sensor			
Compressor			Hermetic Type			
Condenser Type			Block Condenser, No Pin, Filter Free Mechanism			
Refrigerant			Natural (CFC Free Refrigerant System)			
Controller & Display			7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)			
Shelf (Included)			3 Shelf (4 Door), 4 Shelf (5 Door)			
Max. Q'ty of Racks	4-Door		16pcs of 15(5×3)-Placed Rack (RFU4234)	16pcs of 20(5×4)-Placed Rack (RFU4257)	24pcs of 20(5×4)-Placed Rack (RFU4257)	28pcs of 20(5×4)-Placed Rack (RFU4257)
	5-Door		20pcs of 12(4×3)-Placed Rack (RFU5234)	20pcs of 16(4×4)-Placed Rack (RFU5257)	30pcs of 16(4×4)-Placed Rack (RFU5257)	35pcs of 16(4×4)-Placed Rack (RFU5257)
Material	Internal		Stainless-steel (#304)			
	External		Powder Coated steel Plate			
	Inner Door		Powder Coated Stainless-steel (#304)			
Chamber Dimension (w×d×h)	Internal(mm)		600×500×1,310	600×640×1,310	880×620×1,310	980×620×1,310
	External(mm)		840×750×1,900	840×890×1,900	1,120×870×1,900	1,220×870×1,900
Net Weight			210 kg	240 kg	320 kg	350 kg
Packing Size (w×d×h) (cm) & Gross Weight			116×116×222	116×124×222	140×140×221	150×140×221
			296 kg	327 kg	442 kg	472 kg
Power Consumption			373 w/h	458 w/h	503 w/h	588 w/h
Electrical Reqts.			1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	4-Door	230V	DH.SWUF00400	DH.SWUF00500	DH.SWUF00700	DH.SWUF00800
		120V	DH.SWUF03400	DH.SWUF03500	DH.SWUF03700	DH.SWUF03800
Price, Each. ₩						
Cat. No.	5-Door	230V	DH.SWUF00450	DH.SWUF00550	DH.SWUF00750	DH.SWUF00850
		120V	DH.SWUF03450	DH.SWUF03550	DH.SWUF03750	DH.SWUF03850
Price, Each. ₩						

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 55,000별도!

Smart-Lab™ Controller

7″ Full Touch Screen TFT LCD

WiRe™ App Service

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

Controlled by Smart-Phone

Optional Freezer Racks, Boxes, etc. : Please See 195~196 Page

"DuoFreez™ U" Smart-Lab™ ULT Freezer, Class-II Medical Device(NIDS), 4 & 5-Inner Door, −95℃~−65℃

Non-Freon Refrigerants, Auto Vacuum Releasing System, Eco Mode, 393 · 503 · 714 · 796 Lit, Upright-type

초저온 냉동고, 업라이트형, DuoFreez™ System, 7인치 풀터치 스크린 컨트롤러, 친환경 냉매 채용, WiRe™서비스

SMART Ultra-Low Temperature Freezer, "DuoFreez™ U800"

- ***Made in Korea***
- ***UL/CUL & CE Certified***
- ***GD(Good Design)-mark***
- ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***DuoFreez™ System can down to -95℃ and High-stability System can be Offered : If One System fails in operation, the other System still Maintains down to -80℃***
- ***Smart-Lab™ Controlle: Remote Controlled by Smart-Phone with WiRe™ App Service***
  - Ergonomic 7″ Full Touch Screen TFT LCD
  - Internet Connectivity with WiFi
  - Easy Monitoring and Control - Eye level Controller
  - Storage Management & Automatic Temp. Data Recording
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Functions

∗ External Temp. Sensor Hole
∗ CFC-free Refrigerants are used
∗ High-quality Insulation Panel and Inner Doors ensure defrosting around outer surface.
∗ Automatic Vacuum Breaker - Easy to re-open the Door.
∗ Robust & Flexible design of Door Handle
∗ Use of Block Condenser removes filter and causes of related failure.
∗ Filter-free Mechanism lowers heat generated by the compressor
∗ Eco Mode Function for Low Power-consumption.
∗ Inner Door Height : 312mm(4 Door), 252mm(5 Door)
∗ Included Shelves : 3ea.(4 Door), 4ea.(5 Door)

Specifications & Ordering information

Spec. \ Model			"DuoFreez U400" 4 & 5 Door Max. Capa. 393L	"DuoFreez U500" 4 & 5 Door Max. Capa. 503L	"DuoFreez U700" 4 & 5 Door Max. Capa. 714L	"DuoFreez U800" 4 & 5 Door Max. Capa. 796L
Capacity			393 Lit	503 Lit	714 Lit	796 Lit
Freezing System			DuoFreez™ System			
Temp.	Range		−95℃~−65℃		−90℃~−65℃	
			at Room Temperature of 30℃ and Humidity of 70%			
	Sensor		PT100 Sensor			
Compressor			Hermetic Type			
Condenser Type			Block Condenser, No Pin, Filter Free Mechanism			
Refrigerant			Natural (CFC Free Refrigerant System)			
Controller & Display			7″ Full Touch Screen TFT LCD (Smart-Lab™ Controller)			
Shelf (Included)			3 Shelf (4 Door), 4 Shelf (5 Door)			
Max. Q'ty of Racks	4-Door		16pcs of 15(5×3)-Placed Rack (RFU4234)	16pcs of 20(5×4)-Placed Rack (RFU4257)	24pcs of 20(5×4)-Placed Rack (RFU4257)	28pcs of 20(5×4)-Placed Rack (RFU4257)
	5-Door		20pcs of 12(4×3)-Placed Rack (RFU5234)	20pcs of 16(4×4)-Placed Rack (RFU5257)	30pcs of 16(4×4)-Placed Rack (RFU5257)	35pcs of 16(4×4)-Placed Rack (RFU5257)
Material	Internal		Stainless-steel (#304)			
	External		Powder Coated steel Plate			
	Inner Door		Powder Coated Stainless-steel (#304)			
Chamber Dimension (w×d×h)	Internal(mm)		600×500×1,310	600×640×1,310	880×620×1,310	980×620×1,310
	External(mm)		840×750×1,900	840×890×1,900	1,120×870×1,900	1,220×870×1,900
Net Weight			260 kg	300 kg	320 kg	360 kg
Packing Size (w×d×h) (cm) & Gross Weight			116×116×222	116×124×222	140×140×221	150×140×221
			352 kg	392 kg	442 kg	482 kg
Power Consumption	Dual mode		474 w/h	507 w/h	596 w/h	629 w/h
	Eco. mode		373 w/h	458 w/h	503 w/h	588 w/h
Electrical Reqts.			1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	4-Door	230V	DH.SWUF01400	DH.SWUF01500	DH.SWUF01700	DH.SWUF01800
		120V	DH.SWUF02400	DH.SWUF02500	DH.SWUF02700	DH.SWUF02800
Price, Each. ₩						
Cat. No.	5-Door	230V	DH.SWUF01450	DH.SWUF01550	DH.SWUF01750	DH.SWUF01850
		120V	DH.SWUF02450	DH.SWUF02550	DH.SWUF02750	DH.SWUF02850
Price, Each. ₩						

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 55,000별도!

Smart-Lab™ Controller

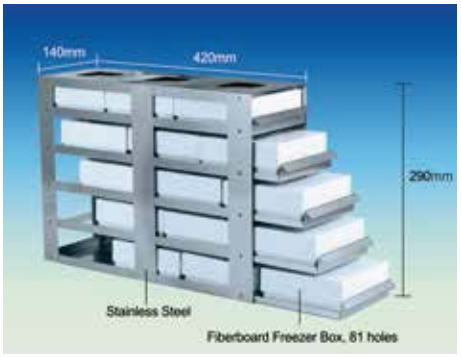
7″ Full Touch Screen TFT LCD

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

Controlled by Smart-Phone

Optional Freezer Racks, Boxes, etc. : Please See 195~196 Page

"UniFreez™ U" & "DuoFreez™ U" Smart-Lab ULT Freezer, Optional Rack



(1) Sliding Drawer-type Rack, 15 Place
"RFU4234SD"

(1) Optional Freezer Rack, Sliding Drawer-type for 0.5~2ml, 3~4ml, 5ml Vial Box

* Stainless-steel (#304) * without Box

For 2 Door-type U80

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
DH.RFU5234SD	"RFU5234SD"	140×420×232	0.5 ~ 2ml, 12(4×3)	U80 (4ea)	
DH.RFU5434SD	"RFU5434SD"	140×420×171	3 ~ 4ml, 6(2×3)		
DH.RFU5534SD	"RFU5534SD"	140×420×211	5ml, 6(2×3)		

For 4 Door-type U400/U500/U700/U800

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
DH.RFU4234SD	"RFU4234SD"	140×420×290	0.5 ~ 2ml, 15(5×3)	U400(16ea)	
DH.RFU4434SD	"RFU4434SD"	140×420×256	3 ~ 4ml, 9(3×3)		
DH.RFU4534SD	"RFU4534SD"	140×420×311	5ml, 9(3×3)		
DH.RFU4257SD	"RFU4257SD"	140×560×290	0.5 ~ 2ml, 20(5×4)	U500(16ea)	
DH.RFU4457SD	"RFU4457SD"	140×560×256	3 ~ 4ml, 12(3×4)	U700(24ea)	
DH.RFU4557SD	"RFU4557SD"	140×560×311	5ml, 12(3×4)	U800(28ea)	

For 5 Door-type U400/U500/U700/U800

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
DH.RFU5234SD	"RFU5234SD"	140×420×232	0.5 ~ 2ml, 12(4×3)	U400(20ea)	
DH.RFU5434SD	"RFU5434SD"	140×420×171	3 ~ 4ml, 6(2×3)		
DH.RFU5534SD	"RFU5534SD"	140×420×211	5ml, 6(2×3)		
DH.RFU5257SD	"RFU5257SD"	140×560×232	0.5 ~ 2ml, 16(4×4)	U500(20ea)	
DH.RFU5457SD	"RFU5457SD"	140×560×171	3 ~ 4ml, 8(2×4)	U700(30ea)	
DH.RFU5557SD	"RFU5557SD"	140×560×211	5ml, 8(2×4)	U800(35ea)	

(2) Side Access-type Rack, 20 Place
"RFU4257SA"

(2) Optional Freezer Rack, Side Access-type for 0.5~2ml, 3~4ml, 5ml Vial Box

* Stainless-steel (#304) * without Box

for 2 Door-type U80

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
DH.RFU5234SA	"RFU5234SA"	140×420×232	0.5 ~ 2ml, 12(4×3)	U80 (4ea)	
DH.RFU5434SA	"RFU5434SA"	140×420×171	3 ~ 4ml, 6(2×3)		
DH.RFU5534SA	"RFU5534SA"	140×420×211	5ml, 6(2×3)		

for 4 Door-type U400/U500/U700/U800

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
DH.RFU4234SA	"RFU4234SA"	140×420×290	0.5 ~ 2ml, 15(5×3)	U400(16ea)	
DH.RFU4434SA	"RFU4434SA"	140×420×256	3 ~ 4ml, 9(3×3)		
DH.RFU4534SA	"RFU4534SA"	140×420×311	5ml, 9(3×3)		
DH.RFU4257SA	"RFU4257SA"	140×560×290	0.5 ~ 2ml, 20(5×4)	U500(16ea)	
DH.RFU4457SA	"RFU4457SA"	140×560×256	3 ~ 4ml, 12(3×4)	U700(24ea)	
DH.RFU4557SA	"RFU4557SA"	140×560×311	5ml, 12(3×4)	U800(28ea)	

for 5 Door-type U400/U500/U700/U800

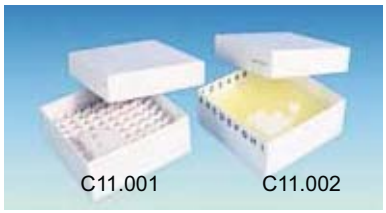
Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
DH.RFU5234SA	"RFU5234SA"	140×420×232	0.5 ~ 2ml, 12(4×3)	U400(20ea)	
DH.RFU5434SA	"RFU5434SA"	140×420×171	3 ~ 4ml, 6(2×3)		
DH.RFU5534SA	"RFU5534SA"	140×420×211	5ml, 6(2×3)		
DH.RFU5257SA	"RFU5257SA"	140×560×232	0.5 ~ 2ml, 16(4×4)	U500(20ea)	
DH.RFU5457SA	"RFU5457SA"	140×560×171	3 ~ 4ml, 8(2×4)	U700(30ea)	
DH.RFU5557SA	"RFU5557SA"	140×560×211	5ml, 8(2×4)	U800(35ea)	

Articles	Cat. No	Description

(1) ~ (3) White Box

(4) 5 Color Assorted Box-Set

(5) 5 Color Hinged Box



(6) Hard Board Storage Box

(1) Temp. Chart Recorder, **"KT622"**

(2) Chart Paper, **"C657",** 60 charts for 420 days

(3) Replacement Pens 6ea, Red color, **"P222",** for Cart Recorder

(4) LCO_2 back up system **"LCO2B"**

(5) Remote Alarm System **"RWAS"**

Optional Cardboard Freezer Box

(1) for 0.5~2ml Cryovial/Microtube, 81 & 100 hole White Box, h52mm
0.5ml : Screwcap Microtube

		Ea. Price,₩	Cs. Price, ₩
SL.Box9001	81-hole Box , White, h52mm, Cell Φ15mm		100ea
SL.Box9002	100-hole Box, White, h52mm, Cell Φ12.5mm		100ea

(2) for 3ml Cryovial, 81 & 100 hole White Box, h77mm
Maybe fit to 4ml Cryovial

		Ea. Price,₩	Cs. Price, ₩
SL.Box9003	81-hole Box , White, h77mm, Cell Φ15mm		100ea
SL.Box9004	100-hole Box, White, h77mm, Cell Φ12.5mm		100ea

(3) for 5ml Cryovial, 64 & 81 hole White Box, h98mm

		Ea. Price, ₩
SL.Box9007	64-hole Box, White, h98mm, Cell Φ16mm	
SL.Box9008	81-hole Box, White, h98mm, Cell Φ15mm	

(4) for 0.5~2ml Cryovial & Microtube, 5 Color Assorted Box-Set, 81 & 100 hole
5 Colors : Blue / Green / Pink / Yellow / White-Assorted

		Set. Price,₩	Cs. Price, ₩
SL.Box9005	81-hole/5 color Box set , h52mm, Cell Φ15mm	5ea	25set
SL.Box9006	100-hole/5 color Box set, h52mm, Cell Φ12.5mm	5ea	25set

(5) for 0.5~2ml Cryovial & Microtube, ID-Color™ 81hole
Cell Φ15mm 5 Color Cardboard Freezer Box-set

∗ 5 Assored Color : Blue · Green · Orange · White · Yellow, 20ea/cs(4Pk×5Color)

		dh Pk. Price,₩	Cs. Price, ₩
SL.Box9014	Freezer Box, 81-hole, for 0.5~2.0ml, 5 Assorted Color	5ea	20ea ∗ 5color assorted 4pk.

(6) for 1.5/2.0ml Cryovial/ Microtube, 81-Holes Cell Φ15mm Hard Board Storage Box
with Hard Board / PP Divider

		Ea. Price, ₩
C11.001	Hard Board Box, with Hard Board Divider, 81 Hole, 133×133×h52 mm	
C11.002	, with PolyPropylene Divider, 81 Hole, 133×133×h52 mm	

Optional Recorder/Remote Alarm System/LCO_2 Back up System

		Ea. Price, ₩
DH.KT622	(1) Temp. Chart Recorder, "**KT622**", with "**C657**" Chart Paper	
DH.C657	(2) Chart Paper, **"C657"**, 60 Charts, for 420 days recording	
DH.P222	(3) Replacement Pens, **"P222",** 6ea Red color, for **"KT622"** Chart Recorder	
DH.LCO2B	(4) LCO_2 Back up System, **"LCO2B"**	
DH.RWAS	(5) Remote Wire/Wireless Alarm System, **"RWAS"**	

ULT Freezer with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.SWUF30400	Validation Service(IQ, OQ), with "UniFreez U400", **"SUFV400"**	
DH.SWUF30500	U500", **"SUFV500"**	
DH.SWUF30700	U700", **"SUFV700"**	
DH.SWUF30800	U800", **"SUFV800"**	
DH.SWUF31400	Validation Service(IQ, OQ), with "DuoFreez U400", **"SUFDV400"**	
DH.SWUF31500	U500", **"SUFDV500"**	
DH.SWUF31700	U700", **"SUFDV700"**	
DH.SWUF31800	U800", **"SUFDV800"**	
DH.WUF30032	Validation Service(IQ, OQ), with "UniFreez U25", **"UFV32"**	
DH.SWUF30075	U80", **"SUFV75"**	

DAIHAN Scientific

Safety Cabinet

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Safety Cabinet, For Chemicals ····· P. 198~200
, For Flammables ····· P. 201

Ducted PP Safety Cabinet for Chemicals
"FGC-2001"

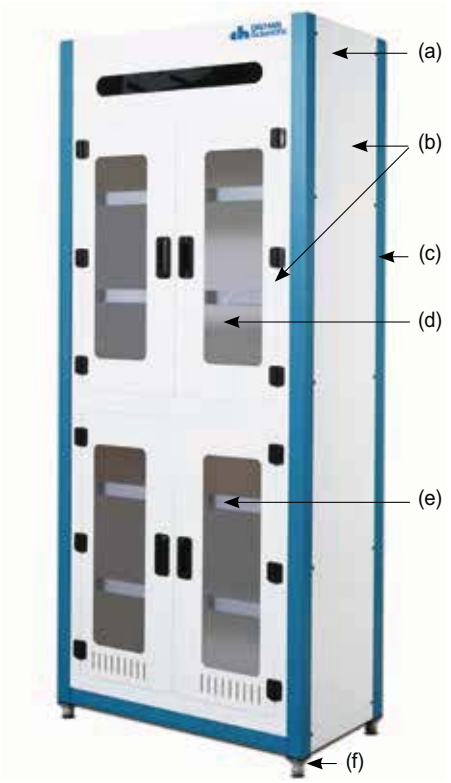
PP Safety Cabinet for Strong Acid & Corrosives
2 Doors, 170Lit

Safety Cabinet for Acid & Corrosives
Single Door, 45Lit

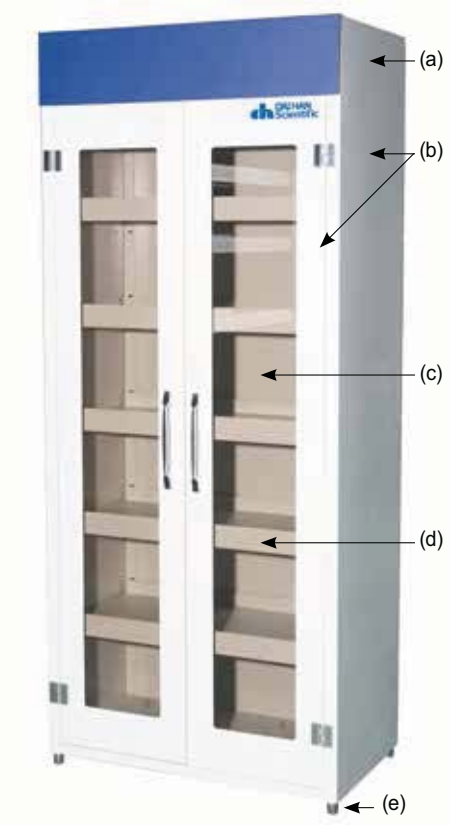
Safety Cabinet for Flammables
Single Door, 45Lit

DAIHAN® Ducted Safety Cabinet, with Clear PVC-/Safety Glass-Door Window, Built-in PP/Al-buttress

With Internal & External PP/Steel Plate, Duct & Pipe Silicon Sealing, Gas Leak Completely Blocked, 닥트형 약품기구 보관장, 환기형



(1) PP Safety Cabinet, **"FGC-2001"**



(2) Steel Safety Cabinet, **"FGC-900"**

- ***Made in Korea*** ■ ***Durable, Hazardous Chemical Gas Remove.***
- ***Internal / External PP Sheet / Steel Plate Good Resistance of Chemicals & Acid.***
- ***Clear PVC-/Tempered Safety Glass-Window***
  (Custom-Made Safety Cabinet : Wide Variety of Material for User Selection)

∗ Discharging Toxic Gas Generated During Storage Various Reagents to the Outside through the Duct Structure
∗ Effective in Maintaining a Comfortable indoor to Prevent the Laboratory Room Air being Polluted.
∗ It may Create a Space to Treat the Harmful Substances in the Human Body Safely and Comfortably
∗ Process Pipe & Duct Silicon Sealing to Completely Block the Gas Leakage to the Outside
∗ Optional Blower User Selection : External-model(Stainless steel-/ Steel-/ PVC-/ PP-Blower)
& Internal-model(Steel-/ PVC-/ PP-Blower)
∗ Optional 24-hour Timer : Automatically Adjustable Exhaust attached to a Safety Cabinet

(1) Ducted PP Safety Cabinet, Clear PVC Door Window

- ***Internal / External PP Material Resistance of Chemicals and Acids***
- ***Built-in PP-buttress*** ■ ***1-Room, 4-Door, 5-Shelf***

∗ Safe Storage of Chemicals and Acids
∗ Door Window : Use the Clear PVC Transparency and Protect the Experimenter Against the Risk of Explosion.
∗ Basic Materials of Construction : Internal(PP), External(PP), 5-stage a Fixed Shelf(PP)

Specifications & Ordering information

Spec. \ Model	"FGC-2001" Length. 900mm	"FGC-2003" Length. 1200mm	"FGC-2005" Length. 1500mm
(a) Duct size	Φ 100mm / Φ 150mm		
(b) Body & Door Material	PP		
(c) Column Material	PVC		
(d) Door Window Material	Clear PVC		
(e) Shelf Material	PP (5 Fixed-type)		
(f) Foot Material	PVC(Height Adjustable up to 30mm)		
Dimension(w × d × h)	900 × 500 × h2100mm	1200 × 500 × h2100mm	1500 × 500 × h2100mm
Power Supply	220V / 60Hz		
Cat. No.	DH.FGC2001	DH.FGC2003	DH.FGC2005
Price, Ea. ₩			

∗ Other Specifications are available upon Customer's Request.

※ **Note! Freight and Installation Charges Separately.**

(2) Ducted Steel Safety Cabinet, Tempered Safety Glass Door Window

- ***Internal/External Steel plate with Powder finished for Resistance of Chemicals***
- ***Built-in Particle Board-plate & Al-buttress*** ■ ***1-Room, 2-Door, 5-Shelf***

∗ Safe Storage of Chemicals
∗ Use Tempered Safety Glass Protects the Experimenter Against the Risk of Explosion.
∗ Basic Materials of Construction : Internal(Steel), External(Steel), 5-stage a Fixed Shelf(PB & Al)

Specifications & Ordering information

Spec. \ Model	"FGC-900" Length. 900mm	"FGC-1200" Length. 1200mm	"FGC-1500" Length. 1500mm
(a) Duct size	Φ 100mm / Φ 150mm		
(b) Body & Door Material	Steel(with Powder Finished)		
(c) Door Window Material	Tempered Safety Glass		
(d) Shelf Material	PB(Particle Board) Plate + Aluminum Buttress (5 Fixed-type)		
(e) Foot Material	Stainless-steel(Height Adjustable up to 30mm)		
Dimension(w × d × h)	900 × 500 × h2100mm	1200 × 500 × h2100mm	1500 × 500 × h2100mm
Power Supply	220V / 60Hz		
Cat. No.	DH.FGC0900	DH.FGC1200	DH.FGC1500
Price, Ea. ₩			

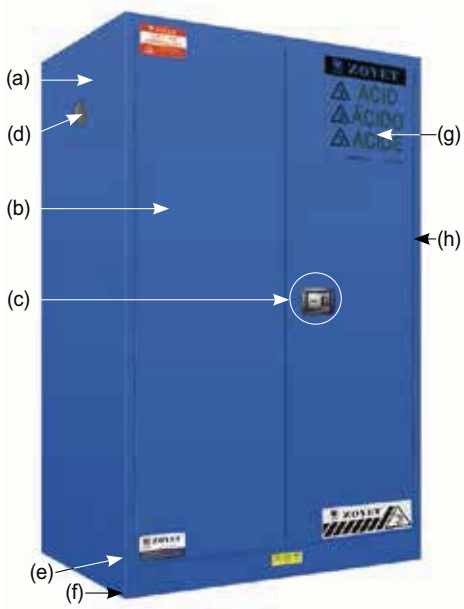
∗ Other Specifications are available upon Customer's Request.

※ **Note! Freight and Installation Charges Separately.**

Zoyet® Safety Cabinet for Acid & Corrosives, with Double Layer Fire Proof Steel, Insulation Layer, 15~410 Lit For Easy Open & Close 180° Door with Double Key, with Steel Shelf, Optional PP Tray, with Manual-/Self Closing-Door Compliance with OSHA 29 CFR 1910.106 and NFPA CODE 30, 안전 케비넷, 산 또는 부식성 시약 보관용

(1), (3) Single Door, 45Lit

(1), (3) Single Door, 83Lit



(2), (4) for Acid & Corrosives, 2 Door, 340Lit

(5) Spare Steel Shelf

(6) Optional PP Tray

■ ***Complies with OSHA 29 CFR 1910.106, NFPA CODE 30 and FM Standard.***

■ ***Safe Construction ;***

- Complete Double Layer Fire Proof Sheet Steel, 38mm of Insulation Layer between Double Layer Wall Space.
- Sheet Steel of Thickness over 1.0mm All-welded Together making it more Durable and Robust.
- Inside and Outside surface of Cabinet is finished on Blue Permanent and Corrosion- resistant Paints.
- Spill Control Sill of 5cm Height prevent Maximum Leak Control on Accidental Spill.
- 3-point Inter-active Locking System Provides Easy, Fail-safe, Positive Door Closure.
- Easy open-close 180° Cabinet Door with Double Keys

incl. Adjustable Level Feet × 4

■ ***Special Features ;***

(a) Fully Welded, not Riveted Construction holds Squareness for Long Life and offers greater Protection in a Fire since Air Gaps are reduced.
(b) Inside and Outside surface of Cabinet is finished on Blue Permanent and Corrosion-resistant Paints.
(c) Highly Secure Lock with Dual Protection (Padlock and Key lock) makes Storage Safer.
(d) Dual Vents with Built-in Flash Arresters Strategically placed at Bottom and Opposite Top.
(e) 5cm Leakproof Containment Sump holds Leaks and meets US EPA Requirements.
(f) Adjustable Leveling Feet make it easy to Balance Cabinets on Uneven Surface.
(g) Label makes it Apparently Visible for Site Manager or Operators to identify where the Chemicals stored quickly.
(h) Continuous Piano Hinge provides better Open-close Smooth Operation, ensuring Endurance and Reliability.

※ **Note! Freight and Installation Charges Separately.**

(1) with Manual-closing Single Door, 15~83 Lit Shelf Capacity : 50kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004B	1 Door, Manual, 1 Shelf, 15Lit	w430×d430×h560mm , 35kg	
HW.ZYC0012B	, 45Lit	w590×d460×h890mm , 56kg	
HW.ZYC0022B	, 2 Shelf, 83Lit	w590×d460×h1650mm, 85kg	

(2) with Manual-closing 2 Door, 114~410 Lit Shelf Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030B	2 Door, Manual, 1 Shelf, 114Lit	w1090×d460×h1120mm, 100kg	
HW.ZYC0045B	, 2 Shelf, 170Lit	w1090×d460×h1650mm, 138kg	
HW.ZYC0060B	, 227Lit	w860×d860×h1650mm , 165kg	
HW.ZYC0090B	, 340Lit	w1090×d860×h1650mm, 190kg	
HW.ZYC0110B	, 410Lit	w1500×d860×h1650mm, 270kg	

(3) with Self-closing Single Door, 15~83 Lit Shelf Capacity : 50kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004BS	1 Door, Self-closing, 1 Shelf, 15Lit	w430×d430×h560mm , 35kg	
HW.ZYC0012BS	, 45Lit	w590×d460×h890mm , 56kg	
HW.ZYC0022BS	, 2 Shelf, 83Lit	w590×d460×h1650mm, 85kg	

(4) with Self-closing 2 Door, 114~410 Lit Shelf Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030BS	2 Door, Self-closing, 1 Shelf, 114Lit	w1090×d460×h1120mm, 100kg	
HW.ZYC0045BS	, 2 Shelf, 170Lit	w1090×d460×h1650mm, 138kg	
HW.ZYC0060BS	, 227Lit	w860×d860×h1650mm , 165kg	
HW.ZYC0090BS	, 340Lit	w1090×d860×h1650mm, 190kg	
HW.ZYC0110BS	, 410Lit	w1500×d860×h1650mm, 270kg	

(5) Spare Steel Shelf for Flammable / Acid & Corrosives Safety Cabinet

		Ea. Price,₩
HW.GB0004	Steel Shelf, for 15Lit Cabinet , w340×d340×h28mm	
HW.GB0012	, for 45/83Lit Cabinet , w500×d370×h28mm	
HW.GB0030	, for 114/170Lit Cabinet, w1000×d370×h28mm	
HW.GB0060	, for 227Lit Cabinet , w770×d770×h28mm	
HW.GB0090	, for 340Lit Cabinet , w1000×d770×h28mm	
HW.GB0110	, for 410Lit Cabinet , w1400×d770×h28mm	

(6) Optional PP Tray for Acid & Corrosives Safety Cabinet

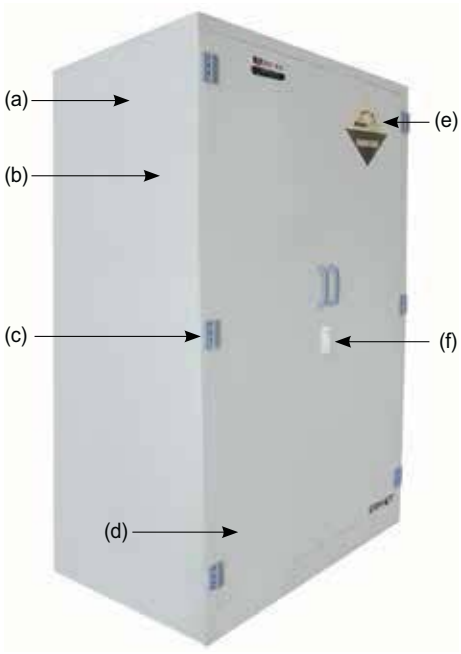
		Ea. Price,₩
HW.PPGB0004	PP Tray, for 15Lit Cabinet , w330×d330×h35mm	
HW.PPGB0012	, for 45/83Lit Cabinet , w490×d360×h35mm	
HW.PPGB0030	, for 114/170Lit Cabinet, w990×d360×h35mm	
HW.PPGB0060	, for 227Lit Cabinet , w760×d760×h35mm	
HW.PPGB0090	, for 340Lit Cabinet , w1000×d760×h35mm	
HW.PPGB0110	, for 410Lit Cabinet , w1390×d760×h35mm	

Zoyet® PP Safety Cabinet for Strong Acid & Corrosives, with Liquid-tight, with All-welded Interior, 15~170 Lit

According to OSHA Requirement, with White Durable Polypropylene, PP 안전 케비넷, 산 & 부식물질 보관용

CE EN 14470-1 OSHA EPA COMPLIANT

(1) PP, Single Door, 15Lit



(2) PP, 2 Door, 170Lit

(3) Spare PP Shelf (4 Hooks included)

- ***Meets OSHA Requirement for Secondary Containment.***
- ***White Durable Polypropylene Cabinet is intended to store Acid and Corrosive Substance, such as Example, Sulfuric Acid, Hydrochloric Acid, Acetic Acid, Nitric Acid, Sodium Hydroxide, Potassium Hydroxide etc.***
- ***Store the most Corrosive Chemicals with no fear of Rust or Corrosion of the Storage Cabinet.***
- ***All Cabinets have Liquid-tight, All-welded Interior to Contain Accidental Spills.***
- ***Special Features ;***
  - (a) PP Cabinet Body adopts High Quality Anti-shock White PP board of 8mm Thickness, Welded as a Whole with Same Property and Color Welding Bar.
  - (b) Equipped with Internationally recognized Leakage Proof Shelf, which could be detached out to be cleaned. Adjustable Shelf
  - (c) PP Hinges for Durability and Long Life.
  - (d) Cabinet Door could be customized as Left-open or Right-open.
  - (e) Cabinet Doors are marked clearly with Warning Label Reading "CORROSIVE".
  - (f) To improve Operational Safety, Padlock could be used to provide Extra Protection.

※ **Note! Freight and Installation Charges Separately.**

(1) Manual-closing Single Door, 15~45 Lit Shelf Capa. : 25kg(for 15L), 30kg(for 45L)

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYP0004	1 Door, Manual, 1 Shelf, 15Lit	w430×d430×h560mm, 11kg	
HW.ZYP0012	, 45Lit	w590×d460×h890mm, 25kg	

(2) Manual-closing 2 Door, 100~170 Lit Shelf Capa. : 35kg(for 100L), 40kg(for 114/170L)

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYP0026	2 Doors, Manual, 1 Shelf, 100Lit	w910×d600×h900mm , 46kg	
HW.ZYP0030	, 114Lit	w1090×d460×h1120mm, 52kg	
HW.ZYP0045	, 2 Shelf, 170Lit	w1090×d460×h1650mm, 75kg	

(3) Spare PP Shelf for Acid & Corrosives PP Safety Cabinet

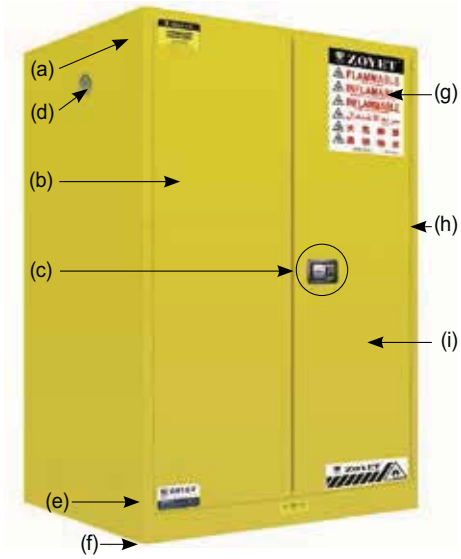
		Ea. Price,₩
HW.PPS04	PP Shelf, for 15Lit Cabinet, w405×d345×h78mm	
HW.PPS12	, for 45Lit Cabinet, w565×d375×h78m	
HW.PPS26	, for 100Lit Cabinet, w885×d515×h78mm	
HW.PPS30	, for 114 & 170Lit, Cabinet, w1065×d375×h78mm	

Polypropylene (PP) Safety Cabinet for Acid & Corrosives

Zoyet® Safety Cabinet for Flammables, with Double Layer Fire Proof Steel with Insulation Layer, 15~410 Lit For Easy Open & Close 180° Door with Double Key, with High Visible Warning Label, with Manual-/Self Closing-Door Compliance with OSHA 29 CFR 1910.106 and NFPA CODE 30, 안전 케비넷, 인화성 시약 보관용

(1), (3) for Flammables, Single Door, 15Lit

(2), (4) for Flammables, 2 Door, 114Lit



(2), (4) for Flammables, 2 Door, 340Lit

(5) Spare Steel Shelf

■ ***Complies with US OSHA 29 CFR 1910.106, NFPA CODE 30 and FM Standard***

■ ***Safe Construction ;***

- Complete Double Layer Fire Proof Sheet Steel, 38mm of Insulation Layer between Double Layer Wall Space.
- Sheet Steel of Thickness over 1.0mm All-welded Together making it more Durable and Robust, with Better Fire Proof Capacity.
- Galvanized Steel Shelves direct Spills to Back and Bottom of a Leakproof 50mm/150mm Bottom Sump.
- Spill Control Sill of 5cm Height prevent Maximum Leak Control on Accidental Spill.
- 3-point Inter-active Locking System Provides Positive Closure with Increased Heat Resistance.
- Easy open-close 180° Door with Double Keys (Padlock and Key Lock)
- Built-in Grounding Connector on Outside Side Panel for Easy Grounding

incl. Adjustable Level Feet × 4

■ ***Special Features ;***

(a) Fully Welded, not Riveted Construction holds Squareness for Long Life and offers greater Protection in a Fire since Air Gaps are reduced.
(b) Safety Shelves direct Spills to back and Bottom of Leakproof Sump. Adjustable on 60mm Centers, they meet ANSI Standards with a 99kg Theoretically Allowable Load.
(c) Highly Secure Lock with Dual Protection (Padlock and Key lock) makes Storage Safer.
(d) Dual Vents with Built-in Flash Arresters Strategically placed at Bottom and Opposite Top.
(e) 5cm Leakproof Containment Sump holds Leaks and meets US EPA Requirements.
(f) Adjustable Leveling Feet make it easy to Balance Cabinets on Uneven Surface.
(g) Label makes it Apparently Visible for Site Manager or Operators to identify where the Chemicals stored quickly.
(h) Continuous Piano Hinge provides better Open-close Smooth Operation, ensuring Endurance and Reliability.
(i) Durable and Chemical-resistant, Lead-free Powder-coat Paint Finish, Inside and Out, retains High Gloss Look and minimizes the Effects of Corrosion and Humidity.

※ **Note! Freight and Installation Charges Separately.**

(1) with Manual-closing Single Door, 15~83 Lit, Shelf Capacity : 50kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004	1 Door, Manual, 1 Shelf, 15Lit	w430×d430×h560mm , 35kg	
HW.ZYC0012	, 45Lit	w590×d460×h890mm , 56kg	
HW.ZYC0022	, 2 Shelf, 83Lit	w590×d460×h1650mm, 85kg	

(2) with Manual-closing 2 Door, 114~410 Lit, Shelf Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030	2 Doors, Manual, 1 Shelf, 114Lit	w1090×d460×h1120mm, 100kg	
HW.ZYC0045	, 2 Shelf, 170Lit	w1090×d460×h1650mm, 138kg	
HW.ZYC0060	, 227Lit	w860×d860×h1650mm , 165kg	
HW.ZYC0090	, 340Lit	w1090×d860×h1650mm, 190kg	
HW.ZYC0110	, 410Lit	w1500×d860×h1650mm, 270kg	

(3) with Self-closing Single Door, 15~83 Lit, Shelf Capacity : 50kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004S	1 Door, Self-closing, 1 Shelf, 15Lit	w430×d430×h560mm , 35kg	
HW.ZYC0012S	, 45Lit	w590×d460×h890mm , 56kg	
HW.ZYC0022S	, 2 Shelf, 83Lit	w590×d460×h1650mm, 85kg	

(4) with Self-closing 2 Door, 114~410 Lit, Shelf Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030S	2 Doors, Self-closing, 1 Shelf, 114Lit	w1090×d460×h1120mm, 100kg	
HW.ZYC0045S	, 2 Shelf, 170Lit	w1090×d460×h1650mm, 138kg	
HW.ZYC0060S	, 227Lit	w860×d860×h1650mm , 165kg	
HW.ZYC0090S	, 340Lit	w1090×d860×h1650mm, 190kg	
HW.ZYC0110S	, 410Lit	w1500×d860×h1650mm, 270kg	

(5) Spare Steel Shelf for Flammable / Acid & Corrosives Safety Cabinet

		Ea.	Price,₩
HW.GB0004	Steel Shelf, for 15Lit Cabinet , w340×d340×h28mm		
HW.GB0012	, for 45/83Lit Cabinet , w500×d370×h28mm		
HW.GB0030	, for 114/170Lit Cabinet, w1000×d370×h28mm		
HW.GB0060	, for 227Lit Cabinet , w770×d770×h28mm		
HW.GB0090	, for 340Lit Cabinet , w1000×d770×h28mm		
HW.GB0110	, for 410Lit Cabinet , w1400×d770×h28mm		

DAIHAN Scientific

Shaker

Mixer, Rocker ····· P. 204
, Rotor ····· P. 204
, Vortex ····· P. 203~204
Shaker, Orbital Motion ····· P. 205~207
, Reciprocating Motion ····· P. 207~208
, Rocker ····· P. 209
, Rotator ····· P. 210

● Mixer, Vortex

"MaXshake VM30"

"VM-100"

● Mixer, Tube Mix Rotor

"MixR-40"

● Shaker, Rocker

"RK-1D"

● Shaker, Orbital/Reciprocating

"SHO-1D"

"ShkO-300"

"SHR-2D"

"MaXshake OB2"

"MaXshake RP2"

● Shaker, Rotator

"RT-10"

DAIHAN® Hi-performance Multifunction Vortex Mixer-set "MaXshake™ VM30", 3,300rpm, with Certi. & Traceability

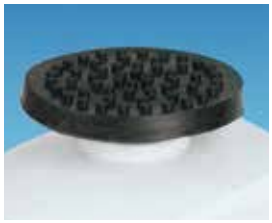
With Φ76mm(3inch) Platform Head & Pop-off Cup Head, Variable Speed Control, Continuous or Touch-on Mixing

다용도 볼텍스 믹서, 다양한 속도 조절, 인체공학적 디자인 적용, 강력하고 안정된 동작과 저소음

Multifunction Vortex Mixer Set "MaXshake™ VM30" with Φ76mm(3˝) Platform(PM110)

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Mixing Solutions in Test Tubes or Small Flasks with Circular, Oscillating Movement***
- ***Variable Speed Control Allows Slow Speed Shaking Action up to High Speed Vortexing***

∗ Gentle Mixing to Re-suspending Pellet ∗ Ergonomic Design with Stable Low Profile Body.
∗ A Robust and Sturdy Diecast Construction Vortex Mixer.
∗ Exceptional Stability on the Bench Thanks to the Combination of Weight and Non-slip Feet.
∗ Variable Speed up to 3,300rpm. ∗ Continuous-run or Touch-activated Run Modes.
∗ Variable Speed for Gentle to Vigorous Mixing. ∗ Powerful Motor for Efficient Mixing
∗ Circular Orbit for an Effective Vortex at any Speed
∗ Constant Torque within the Full Range of Speed. ∗ Eccentric with Oil-less Ball Bearings
∗ Optimized Counter Balance System Minimizes Vibration.
∗ Counter Balance Design for Minimal Body Vibration.
∗ Special Designed Silicon Feet Absorb Vibration at High Speeds.
∗ Speed Regulation through Knob provided on the Control Panel
∗ Electronic Speed Control for Constant Speed even during Changes in Load
∗ Conical Tube can be Mixed Smoothly by Hand Holding.
∗ One Mixing Head for a Variety of Tube Sizes
∗ Universal Head for a Variety of Mixing Applications
∗ Accepting Vessels up to 76mm Diameter
∗ MBR(Methyl Methacrylate Butadiene Rubber) Feet for Ultra Stability and Vibration Damping



(1) Platform Head, Φ76mm(3inch) "PM110" (Included)

(2) Pop-off Cup Head "PM210" (Included)

(3) Microtube Platform Head, 0.5~2.0ml Tube "PM310" (Optional)

Remove Applicator (Included)

Specifications & Ordering information

Spec. \ Model			"MaXshake™ VM30"
Speed Range			0 ~ 3,300 rpm
Shaking Motion			Orbital, Circuit Orbit : 4.0mm
Control			Analog Phase Controller
Motor			Brushless AC Motor
Head (Included)			Pop-off Cup Head and Φ76mm Platform Head
Max. Load			0.5kg
Material			Aluminum Die-casting with Powder Coating
Dimensions (w×d×h) (mm)			140×190×h123 mm
Weight			3 kg
Others			3-position Power Switch Operates Aluminum Die-casting with Powder Coating
Packing Dimension (w×d×h) (mm)			175×255×h215 mm
Gross Weight			3 kg
Power Consumption			30 W
Electrical Reqts.			1 Phase, AC 120V, 50 / 60Hz or AC 230V, 50 / 60Hz
Cat. No.	230V	60Hz	DH.WVM00030
		50Hz	DH.WVM00031
	120V	60Hz	DH.WVM00032
		50Hz	DH.WVM00033
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

Spare Platform Head

		Ea. Price, ₩
DH.WVM00110	(1) Platform Head, **"PM110"**, Φ76mm(3inch)	
DH.WVM00210	(2) Pop-off Cup Head, **"PM210"**	

Optional Platform Head

		Ea. Price, ₩
DH.WVM00310	(3) Microtube Platform Head(0.5~2.0ml), **"PM310"**	

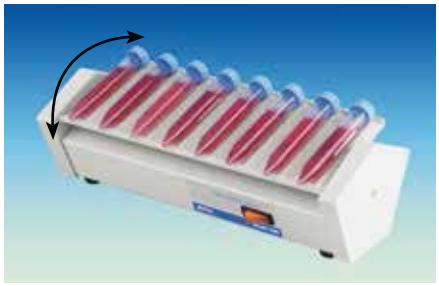
Articles	Cat. No	Description

DAIHAN® Mini Vortex Mixer "VM-100", Up to 3,200rpm
With Silicone Head, Space Saving Compact Design, Variable Speed Control, 소형 볼텍스 믹서

■ ***Quality Certification : ISO 9001***
■ ***Ideal for Mixing Solutions in Test Tubes Oscillating Movement***
∗ Mini Size saved the Space of Working Desk
∗ Variable Speed Control and Automatically Press Start
∗ Powerful and Quiet Vortex Mixing Action for Tubes up to 50ml
∗ Blue/Orange Silicon Top Head
∗ Max. Speed : 3,200 rpm ∗ Orbit : 4.5mm
∗ Overall Dimension & Weight(N.W./G.W.) : 55×173×h81 mm, 0.77 / 0.9 kg

		Ea. Price, ₩
DH.WVM0100.B	Mini Vortex Mixer, **"VM-100"**, for 230V, Blue Silicon Head	
DH.WVM0100.O	, Orange Silicon Head	

DAIHAN® Compact Multifunction Mixer/Rocker "MixM-100", Smoothly Rocking Motion, 24rpm
With Rubber Cushion Platform, Continuous Operation, Ideal for Dishes(≥Φ100mm) or 1.5~50㎖ Tubes, 소형 다기능 믹서-락커



■ ***Quality Certification : ISO 9001.***
■ ***Ideal for Dishes(≥Φ100mm) and 1.5 ~ 50ml Tubes.***
■ ***Capacity ; 3ea - Φ100mm Dishes, or 30ea - 1.5ml Microtubes, or 15ea - 15ml Tubes, or 8ea - 50ml Tubes.***
■ ***Easy to load and unload the Test Tubes without Turning the Mixer Off.***
■ ***Rubber Cushion preventing the Test Tubes from Slipping.***
∗ Widely used in Hematology, Chemistry, Research and Bacteriology Laboratories.
∗ Smooth, Steady, Quiet, and Continuous Operation
∗ Speed : 24rpm at 60Hz / 20rpm at 50Hz
∗ Platform Dimension : w300×d115 mm
∗ Overall Dimension & Weight(N.W./G.W.) : w350×d140×h110 mm, 1.5 / 2.0 kg

		Ea. Price, ₩
DH.MixM0100	Compact Mixer/Rocker, **"MixM-100"**, for 230V	
DH.MixM0101	, **"MixM-101"**, for 120V	

DAIHAN® Tube Mix Rotor "MixR-40", with 5×Mixing Rollers, Rocking & Rolling-motion, Fixed 40rpm
Ideal for 15~50㎖ Test Tube, with Timer/Minimum Noise Motor/Cooling Pan/0~60min Timer, 튜브 믹싱 로터

■ ***Made in Korea*** ■ ***with 5×Mixing Rollers(Φ32×L325mm)***
■ ***Ideal for Mixing Blood Samples, Viscous Substances and Liquid-Solid Suspensions, Use in a Variety of Applications, Prevention of Blood Coagulation and Immune Precipitation, etc.***
■ ***Rocking & Rolling Mixing-motion for Complete Sample Mixing***
∗ Stability Mixing Motion and Built in Minimize Noise AC Synchronous Motor
∗ Built in Cooling Pan Protecting Over Temperature for Long Operating Time.
∗ Can Use with 8ea×15ml Test Tubes or 8ea×50ml Test Tubes.
∗ Stability Fixed 40rpm Mixing Speed
∗ Built in 99hr 59min Timer for User Convenience
∗ Can be Used in Cold Lab Chambers or Incubators

Specifications & Ordering information

Spec. \ Model	"MixR-40"
No. of Mixing Roller	5ea×Mixing Rollers
Mixing Roller Size & Material	Φ32×L325 mm, PVC
Mixing Speed	Fixed 40rpm
Motor	AC Synchronous Motor, 12W
Timer	0~60min Analog Timer/Continuous Run
Material(Body)	Powder-coated Steel
Dimension & Weight	490×220×h100 mm, 3 kg
Electric Reqts.	AC 230V, 50/60Hz
Cat. No.	**DH.MixR1040**
Price, Each. ₩	

DAIHAN® Analog Orbital Shaker "ShkO-300", 10 Levels Speed Control/40~300rpm
With Standard Rubber Mat Platform, 0~60min Timer, 궤도형 쉐이커

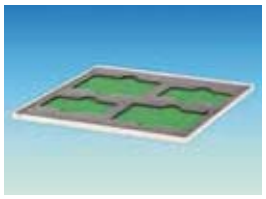
Orbital Shaker "ShkO-300"

- ***Made in Korea***
- ***Stepless Speed Controller(10Levels Speed/40~300rpm)***
- ***Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, and Combinatorial Chemistry, etc.***
- ***Included Rubber Mat Platform***
- ***Optional PCR Plate- / Universal Perforated-Platform***

∗ Brushless DC Motor : Low Noise and Long Life time
∗ Optimal Platform Rotation for Intensive Mixing
∗ Built in 0~60min Timer for User Convenience

Specifications & Ordering information

Spec. \ Model	"ShkO-300"
Speed Range	40~300 rpm, 10 Levels Speed Control
Shaking Motion	Orbital Motion
Motor	20W DC 12V Motor
Timer	0~60min Analog Timer/Continuous Run
Platform Size	285×285×h10 mm
Material	Powder-coated Steel
Dimension (w×d×h)	250×280×180mm
Net Weight	7 kg
Packing Size (w×d×h) & Gross Weight	320×350×250mm
	7.5 kg
Electric Reqts.	AC 230V, 50/60Hz
Cat. No.	DH.ShkO1300
Price, Each. ₩	



(1) PCR Plate Platform (Optional)

(2) Universal Perforated Platform and STS Wire Spring Flask Holders (Optional)

Optional or Spare Platform/Flask Holder

Cat. No		Ea. Price, ₩
DH.ShkO3001	(1) PCR Plate Platform, for PCR Plate, w285×d285mm	
DH.WSO504100	(2) Universal Platform, for Flask Holder, w230×d230mm	
DH.WIS600100	(2) STS Wire Spring Flask Holder, **"FHS100"**, for 100ml Flask	
DH.WIS600250	, **"FHS250"**, for 250ml Flask	
DH.WIS600500	, **"FHS500"**, for 500ml Flask	
DH.WIS601000	, **"FHS1000"**, for 1000ml Flask	

Spec. \ Model		Shk-300
Max. Capacity of Flask Holder	For 50~100ml	9 ea
	For 200~300ml	7 ea
	For 500~1000ml	4 ea

DH.ShkO3003 **Spare ;** Rubber Mat Platform, Multi-use, w285×d285mm

DAIHAN® Digital Orbital Shaker "SHO", 10~300 rpm, Low Noise & Long Life Cycle, with Certi. & Traceability

With Programmable Digital Feedback Control, without Platforms, 디지털 궤도형 쉐이커, 저소음 및 긴 수명, 부드러운 시동 동작 및 속도조절

Figure ; Orbital Shaker "SHO" +
(2) Rubber Mat Platform(Option)

- ***Made in Korea*** ***CE Certified*** ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, and Combinatorial Chemistry***
- ***Patented Jog-Shuttle Control System***

∗ Optimal Platform Rotation for Intensive Mixing ∗ Brushless DC Motor(Low Noise & Long Life Cycle)
∗ High Precision Digital Rotation Speed Control ∗ Programmable Operation Mode Supported
∗ Digital LCD with Back-Light Function
∗ Smooth Start and Change of Shaking Speed for Stable Running
∗ Storage Function(Program, RPM, Timer), Alarm(Error Status and Timer-end) & Overload Protection
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

Spec. \ Model	A. "SHO-1D" Plate Size 230×230 mm	B. "SHO-2D" Plate Size 350×350 mm
Shaking Motion	Orbital Motion	
Speed Range	10 ~ 300 rpm	
Max. Load	8 kg	10 kg
Amplitude of Rotation (mm)	8 mm	15 mm
Motor	Brushless DC Motor	
Permissible Ambient Temp.	Ambient +5 ~ 50℃	
Permissible Relative Moisture	85%	
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end	
Display	Digital LCD with Back-Light Function	
Controller	Programmable Digital Feedback Controller with Jog-Shuttle Switch(Turn+Push)	
Program Function	10 Steps, 6 Programs	
Safety Circuit	Overload Protector for Motor	
Dimension (w×d×h) (mm)	260×330×150	400×480×160
Net Weight	14 kg	20 kg
Packing Size (w×d×h) (mm) & Gross Weight	450×350×250	580×500×250
	18 kg	23 kg
Power Consumption	40 W	
Electrical Reqts.	Free Voltage (1 Phase, AC 80V~240V, 50/60Hz)	
Cat. No. 230V	DH.WSO04010	DH.WSO04012
Cat. No. 120V	DH.WSO05010	DH.WSO05012
Price, Each. ₩		

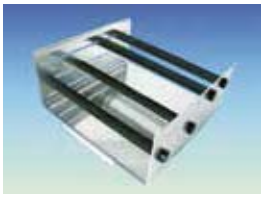
∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

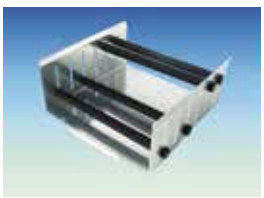
<Optional Accessory>

(1) Universal Perforated Platform & Flask Holder

(3) Universal Spring Rack "SP140" / "SP240"



(4) Platform for Flasks "SP120" / "SP220"



(5) Platform for Separatory Funnels "SP130" / "SP230"

Optional Platform/Flask Holder/Spring Rack

Ea. Price, ₩

DH.WSO504100 (1) Universal Platform, **"SP100"**, for **"SHO-1D"**, 230×230mm
DH.WSO504200 , **"SP200"**, for **"SHO-2D"**, 350×350mm

DH.WIS600100 (1) STS Wire Spring Flask Holder, **"FHS100"**, for 100ml Flask
DH.WIS600250 , **"FHS250"**, for 250ml Flask
DH.WIS600500 , **"FHS500"**, for 500ml Flask
DH.WIS601000 , **"FHS1000"**, for 1000ml Flask

Spec. \ Model	SHO-1D	SHO-2D
Max. Capacity of Flask Holder For 50~100ml	9 ea	20 ea
Max. Capacity of Flask Holder For 200~300ml	7 ea	16 ea
Max. Capacity of Flask Holder For 500~1000ml	4 ea	9 ea

DH.WSO504110 (2) Rubber Mat Platform, **"SP110"**, for **"SHO-1D"**, 270×270mm
DH.WSO504210 , **"SP210"**, for **"SHO-2D"**, 370×370mm

DH.WSO504140 (3) Uni. Spring Rack, **"SP140"**, for **"SHO-1D"**, 270×270×h100mm
DH.WSO504240 , **"SP240"**, for **"SHO-2D"**, 370×370×h100mm

DH.WSO504120 (4) Platform for Flasks, **"SP120"**, for **"SHO-1D"**, 350×230×h153mm
DH.WSO504220 , **"SP220"**, for **"SHO-2D"**, 350×350×h153mm

DH.WSO504130 (5) Platform for Sep. Funnels, **SP130**, for **SHO-1D**, 350×235×h174mm
DH.WSO504230 , **SP230**, for **SHO-2D**, 351×355×h174mm

DAIHAN® Premium Digital Orbital & Reciprocating Shaker "MaXshake™", Powerful Compact Design, 10~300 rpm

With Programmable func., Large LCD Display, Quiet & Low-vibration, Available Rubber Mat-/Universal-Platform(Optional), without Platform

디지털 궤도형 & 왕복형 쉐이커, Small Gaint Power, 저소음/저진동 긴 수명, 부드러운 시동 동작 및 속도 조절

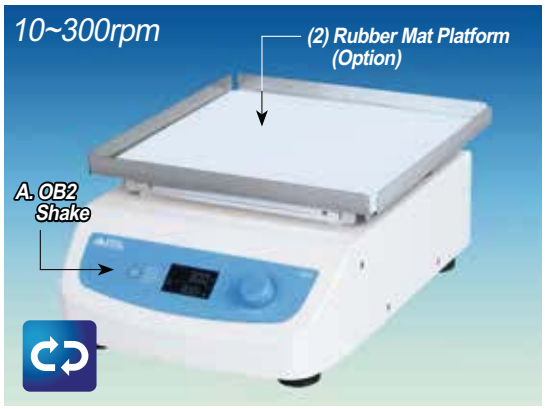


Figure ; Orbital Shaker "MaXshake™ OB2" + (2) Rubber Mat Platform(Option)

Figure ; Orbital Shaker "MaXshake™ RP2" + (1) Universal Platform & Flask Holder(Option)

- ***Made in Korea***
- ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, Chemistry***
- ***Patented Jog-Shuttle Control System*** ∗ Variable Accessories are Available (Optional)

∗ Hybridization, Washing Blots, Culturing Microbes
∗ Compact Design Easily Fits in Incubators and on the Laboratory Bench.
∗ Soft Start and Noise-free Operation. ∗ Digital Speed Control easily adjusts from 10 to 300 rpm
∗ Built-in Digital Timer. Use in Continuous Shaking or Timer Mode up to 99 hr 59 min.
∗ Gentle Speed up and Slow down by PID Speed Control. Slow Start Motion decreases Risk of Spills.
∗ Large LCD for Speed and Time Adjustment, makes it possible to read the Speed, Timer Function and Operating Mode.
∗ Low Vibration, Low Noise ∗ Clearly laid out Control Panel for easy Operation.
∗ Speed Regulation by Microprocessor. ∗ Excellently Applicable for Continuous Operation.
∗ Constant Speed Independent Ofload. ∗ Comprehensive Range of Accessories.
∗ Audible Buzzer Alarms on Time Expiration and when an Error Occurs.
∗ Over-speed Detection and Protection. ∗ Automatic Recovery from Power Break.
∗ Brushless Motor Provides Maintenance Free Operation.

Specifications & Ordering information

Spec. \ Model	A. "MaXshake™ OB2" Orbital Motion	B. "MaXshake™ RP2" Reciprocating Motion
Shaking Platform Size	255×255 mm	
Shaking Motion	Orbital Motion	Reciprocating Motion
Speed Range & Max. Load	10 ~ 300 rpm, 10kg	
Amplitude of Rotation (mm)	10 mm	
Motor	Brushless DC Motor	
Permissible Temp. & Moisture	Ambient +5 ~ 50℃, 80%	
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end	
Display	Large Size Digital LCD with Back-Light Function	
Controller	Digital Fuzzy Controller with Touch Button, Jog-dial	
Program Function	10 Steps, 6 Programs	
Platform	Universal Platform for various Shapes & Size of Flask	
Dimension & Weight	376×375×h138 mm(Base Platfrom : 255×255 mm), 13kg	
Packing Dimension & Weight	345×420×h205 mm, 13.5kg	
Safety Circuit	Overload Protector for Motor	
Power Consumption	45 W	
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	

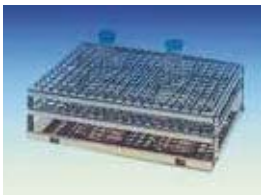
Cat. No.	230V	DH.WSO00300	DH.WSR00300
	120V	DH.WSO00301	DH.WSR00301
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

<Optional Accessory>

(1) Universal Perforated Platform & Flask Holder



(3) Universal Spring Rack

(4) Platform for Flasks

(5) Platform for Separatory Funnels

Optional Platform/Flask Holder/Spring Rack

		Ea. Price, ₩
DH.WSO604100	(1) Universal Platform, w251×d251mm	
DH.WSO604200	(1) , w346×d346mm	
DH.WIS600100	(1) STS Wire Spring Flask Holder, **"FHS100",** for 100ml Flask	
DH.WIS600250	, **"FHS250",** for 250ml Flask	
DH.WIS600500	, **"FHS500",** for 500ml Flask	
DH.WIS601000	, **"FHS1000",** for 1000ml Flask	

Spec. \ Model		251×251mm Universial Platform	346×346mm Universial Platform
Max. Capacity of Flask Holder	For 100ml	9 ea	20 ea
	For 250ml	7 ea	15 ea
	For 500ml	5 ea	9 ea
	For 1000ml	4 ea	6 ea

DH.WSO604110	(2) Rubber Mat Platform, w295×d295mm	
DH.WSO604210	(2) , w370×d370mm	
DH.WSO604140	(3) Universal Spring Rack, w295×d295×h100mm	
DH.WSO604240	(3) , w370×d370×h100mm	
DH.WSO604130	(4) Platform for Round Flask, w350×d260×h153mm	
DH.WSO604230	(5) Platform for Separatory Funnels, w350×d260×h153mm	

DAIHAN® Digital Reciprocating Shaker "SHR", 10~300 rpm, Low Noise & Long Life Cycle, with Certi. & Traceability

With Programmable Digital Feedback Control, without Platforms, 디지털 왕복형 쉐이커, 저소음 및 긴 수명, 부드러운 시동 동작 및 속도 조절

Figure ; Reciprocating Shaker "SHR" + (2) Rubber Mat Platform(Option)

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, and Combinatorial Chemistry***
- ***Patented Jog-Shuttle Control System***

∗ Optimal Platform Rotation for Intensive Mixing ∗ Brushless DC Motor(Low Noise & Long Life Cycle)
∗ High Precision Digital Rotation Speed Control ∗ Programmable Operation Mode Supported
∗ Digital LCD with Back-Light Function
∗ Smooth Start and Change of Shaking Speed for Stable Running
∗ Storage Function(Program, RPM, Timer), Alarm(Error Status and Timer-end) & Overload Protection
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

Spec. \ Model	A. "SHR-1D" Plate Size 230×230 mm	B. "SHR-2D" Plate Size 350×350 mm
Shaking Motion	Reciprocating	
Speed Range	10 ~ 300 rpm	
Max. Load	8 kg	10 kg
Amplitude of Rotation (mm)	8 mm	15 mm
Motor	Brushless DC Motor	
Permissible Ambient Temperature	Ambient +5 ~ 50℃	
Permissible Relative Moisture	85%	
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end	
Display	Digital LCD with Back-Light Function	
Controller	Programmable Digital Feedback Controller with Jog-Shuttle Switch(Turn+Push)	
Program Function	10 Steps, 6 Programs	
Safety Circuit	Overload Protector for Motor	
Dimension (w×d×h) (mm)	260×330×150	400×480×160
Net Weight	14 kg	20 kg
Packing Size (w×d×h) (mm) & Gross Weight	450×350×250 / 18 kg	580×500×250 / 23 kg
Power Consumption	40 W	
Electrical Reqts.	Free Voltage (1 Phase, AC 80V~240V, 50/60Hz)	
Cat. No. 230V	DH.WSR04020	DH.WSR04022
Cat. No. 120V	DH.WSR05020	DH.WSR05022
Price, Each. ₩		

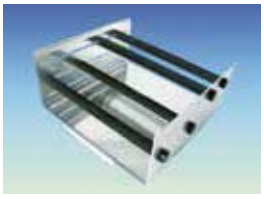
* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

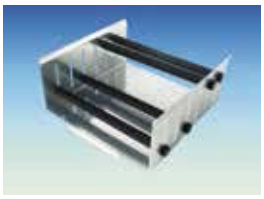
<Optional Accessory>

(1) Universal Perforated Platform & Flask Holder

(3) Universal Spring Rack "SP140" / "SP240"



(4) Platform for Flasks "SP120" / "SP220"



(5) Platform for Separatory Funnels "SP130" / "SP230"

Optional Platform/Flask Holder/Spring Rack

Ea. Price, ₩

DH.WSO504100 (1) Universal Platform, **"SP100"**, for **"SHR-1D"**, 230×230mm
DH.WSO504200 , **"SP200"**, for **"SHR-2D"**, 350×350mm

DH.WIS600100 (1) STS Wire Spring Flask Holder, **"FHS100"**, for 100ml Flask
DH.WIS600250 , **"FHS250"**, for 250ml Flask
DH.WIS600500 , **"FHS500"**, for 500ml Flask
DH.WIS601000 , **"FHS1000"**, for 1000ml Flask

Spec. \ Model	SHR-1D	SHR-2D
Max. Capacity of Flask Holder For 50~100ml	9 ea	20 ea
Max. Capacity of Flask Holder For 200~300ml	7 ea	16 ea
Max. Capacity of Flask Holder For 500~1000ml	4 ea	9 ea

DH.WSO504110 (2) Rubber Mat Platform, **"SP110"**, for **"SHR-1D"**, 270×270mm
DH.WSO504210 , **"SP210"**, for **"SHR-2D"**, 370×370mm

DH.WSO504140 (3) Uni. Spring Rack, **"SP140"**, for **"SHR-1D"**, 270×270×h100mm
DH.WSO504240 , **"SP240"**, for **"SHR-2D"**, 370×370×h100mm

DH.WSO504120 (4) Platform for Flasks, **"SP120"**, for **"SHR-1D"**, 350×230×h153mm
DH.WSO504220 , **"SP220"**, for **"SHR-2D"**, 350×350×h153mm

DH.WSO504130 (5) Platform for Sep. Funnels, **SP130**, for **SHR-1D**, 350×235×h174mm
DH.WSO504230 , **SP230**, for **SHR-2D**, 351×355×h174mm

DAIHAN® Programmable Digital Rocker "RK", Digital Feedback Control, 5~50 rpm, with Certi. & Traceability

With 290×200mm or 300×300mm Platform, Smooth Start & Wave Motion, Tilt Angle ±6°/±9°

디지털 락커, 디지털 피드백 컨트롤 시스템, 부드러운 시동 동작 및 속도 조절

(1) 290×200 mm Rocker "RK-1D" with Included Platform

(2) 300×300 mm Rocker "RK-2D" with Second Platform(Optional)

- ***Made in Korea*** ■ ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***High Precision Digital Speed Control : 1rpm***
- ***Patented Jog-Shuttle Control System***
- ***PL (Product Liability) Insurance***

* Gel Staining, Destaining, Blotting
* Cell Culture, Hybridization, Washing
* High Precision Digital Speed Control : 1rpm
* Programmable Operation Mode Supported : 10 Steps and 6 Programs
* Digital Timer : Max. 99hr 59min
* Digital LCD with Back-Light Function for Timer, RPM and Power Bar-Graph
* Smooth Start and Change of Rocking Speed
* Overload Protection Function for Motor
* Storage Function for Set Values : RPM and Timer
* Alarm Function : Error Status and Timer-end
* Stainless-steel Platform Comes with Gray Nonslip Rubber Pad
* Stackable Platform with Pad to Double Mixing Area (Optional)
* Locking Mode supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

Spec. \ Model		(1) "RK-1D" Platform Size 290×200 mm	(2) "RK-2D" Platform Size 300×300 mm
Dimensions (w×d×h)	Platform (mm)	290×200	300×300
	Overall (mm)	290×240×150	300×330×150
Speed Range (rpm)		5 ~ 50	
Angle (degree)		±6 or ±9 (±9 as Factory Default)	
Motor		14W Geared DC Motor	
Program Function		10 Steps, 6 Programs	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Programmable Digital Feedback Controller with Jog-Shuttle Switch(Turn+Push)	
Safety Circuit		Overload Protector for motor	
Platform (Included)		290×200mm Platform	300×300mm Platform
Others		CE Certified, PL(Product Liability) Insurance Smooth Start and Change of the Stirring Speed for Stable Running Storage Function (RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) Alarm (Error Status and Timer-end)	
Packing Dimension (w×d×h) (mm)		450×350×250	
Gross Weight		7 kg	8 kg
Power Consumption		35 W	
Electrical Reqts.		Free Voltage (1 Phase, AC 80V~240V, 50/60Hz)	
Cat. No.	230V	DH.WRK01010	DH.WRK01020
	120V	DH.WRK02010	DH.WRK02020
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

Optional Second Platform

		Ea. Price, ₩
DH.WRK05011	Second Platform, **"RK5011"**, for **"RK-1D"**, w290×d200, with 4 Pillars(L120mm)	
DH.WRK05021	Second Platform, **"RK5021"**, for **"RK-2D"**, w300×d300, with 4 Pillars(L120mm)	

DAIHAN® Programmable Digital Rotator "RT-10", 0~90° Mixing Angle, 5~60rpm, with Certi. & Traceability

With Digital Feedback Control, Adjustable Speed & Angle of Rotation, Continuous or Timed Operation

디지털 로테이터, 디지털 피드백 컨트롤 시스템, 회전각 및 회전속도 조절 가능

Programmable Digital Rotator "RT-10"
with Optional Disk "WRT120" for 32×1.5ml Tube

- ***Made in Korea*** ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Adjustable Speed and Angle of Rotation : 0 to 90°***
- ***Patented Jog-Shuttle Control System***
- ***PL (Product Liability) Insurance***

* General Mixing, Diffusing, Dialyzing and Hybridization, Aerating Culture
* Keeping Biological Samples in Suspension
* Adjustable Speed and Angle of Rotation : 0 to 90°
* Digital Feedback Control: Steady and Constant Rotating
* Continuous or Timed Operation
* Digital LCD with Back-Light Function
* Programmable Operation Mode Supported : 10 Steps and 6 Programs
* Overload Protection for motor
* Smooth Start and Change of Stirring Speed
* Storage Function for Set values of RPM and Time
* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
* Durable Construction for Long-Term Operation
* 5 Different Disks and 3 Roller Drums(Optional)
* Disk for 250ml Flask is available

(1) Disk, "WRT100"

(2) Disk, "WRT110"

(3) Disk, "WRT120"

(4) Disk, "WRT130"

(5) Disk, "WRT140"

(6) Knob & Post "WRT300" (Included)

Specifications & Ordering information

Spec. \ Model	"RT-10"
Speed range	5~ 60 rpm
Angle range	0°~ 90°
Motor	35W
Program Function	10 Steps, 6 Programs
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end
Display	Digital LCD with Back-Light Function
Controller	Programmable Digital Feedback Controller with Jog-Shuttle
Temp. Resistance	Lower than 65℃ (Dry Air)
Safety Circuit	Overload Protector for motor
Dimensions (w×d×h) (mm)	200×250×h260 mm
Weight	6 kg
Others	CE Certified, PL(Product Liability) Insurance Storage Function (RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) User Self-compensation Function, Alarm (Error Status and Timer-end)
Packing Size (w×d×h) (mm) & Gross Weight	370×240×h430 mm 8.5 kg
Power Consumption	40 W
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz

Cat. No.		
	230V	**DH.WRT00010**
	120V	**DH.WRT00020**
Price, Each. ₩		

* **Other Specifications are available upon Customer's Request.**

Optional Disk & Roller Drum

		Ea. Price, ₩
DH.WRT00100	(1) Disk, **"WRT100"**, for 50ml conical tube×8ea	
DH.WRT00110	(2) , **"WRT110"**, for 15ml conical tube×16ea	
DH.WRT00120	(3) , **"WRT120"**, for 1.5ml conical/centrifuge Tube×32ea	
DH.WRT00130	(4) , **"WRT130"**, for 1.5ml conical/centrifuge Tube×60ea	
DH.WRT00140	(5) , **"WRT140"**, 250ml Flask-capacity×4ea	

Spare Knob & Post

		Ea. Price, ₩
DH.WRT00300	(6) 4×knobs & 4×Post, **"WRT300"**, for Installing Disk	

DAIHAN Scientific

Sterilizer

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Autoclave, Bench-top *New* ..... P. 214~215
, Front Door *New* ..... P. 216
, Vertical ..... P. 212~213
Dry Heat Sterilizer *New* ..... P. 217
Plasma Sterilizer *New* ..... P. 218~219
Accessory ..... P. 213

Autoclave, Bench-top, 40 Lit
"MaXterile™ BT40"

Autoclave, Front Door, 90 Lit
"MaXterile™ FL90"

Autoclave, Vertical, 100 Lit
"MaXterile™ 100"

Low Temp Plasma Sterilizer, 60 Lit
"MaXterile™ PS60"

DAIHAN® Digital Fuzzy-control Autoclave "MaXterile™", Standard-/Recorder-type, 47 · 60 · 80 · 100 Lit

With Electronic Door Lock Sys, Lever-type Sliding Door, Steam Condensing, Solid-/Liquid-Modes, Max.2 kgf/cm², up to 132℃

(1) PED Certified-model(Φ3.0mm Thick-Tank), (2) Non-PED-model(Φ2.0mm Thick-Tank), **전자동 고압 멸균기, 전자식 도어 잠금 시스템**

Standard-type, "MaXterile™ 80"

(1) With PED Certi. 3mm Thick-Tank
(2) Without PED Certi. 2mm Thick-Tank

Built in Recorder-type, "MaXterile™ 80R"

(1) With PED Certi. 3mm Thick-Tank
(2) Without PED Certi. 2mm Thick-Tank

<Continued On Next Page>

- ***Made in Korea*** ■ ***CE and PED Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Patented Special Steam Condensing Mechanism, Lever-type Sliding Door***
- ***Built in DAIHAN® New Generation Controller : Patented Jog-Dial Control System***
- ***Electronic Door Lock Sensing System for User Safety.***
- ***Door Open Button Automatically Lock Over 80℃ for User Safety***
- ***Built in Recorder model (only MaXterile 47R/60R/80R/100R models) : Print Sterilization Cycle Data for Validation and Analyze Sterilization (Temperature, Pressure, Time, Error Status, etc.)***

∗ Ideal for Biotechnology, Clinical, Environmental, Medical and Food Industry.
∗ Innovative Easy-to-Use Digital Fuzzy Controller. ∗ Included 2×Wire Baskets
∗ Digital Timer Function - 'Delay Time' and 'Operation Time' can be Controlled.
∗ Solid / Liquid Mode can be chosen by a customer considering a Sample Phase.
∗ Water Low Level Detection ∗ Automatic Over Pressure Release Valve ensures User Safety.
∗ Sterilization Error Indication : Error Alarm and Massage in case of Power Failure and Temperature Error

Specifications & Ordering information

Standard-type Models		"MaXterile 47" Max. 47Lit	"MaXterile 60" Max. 60Lit	"MaXterile 80" Max. 80Lit	"MaXterile 100" Max. 100Lit
		Standard-type			
Built in Recorder-type Models		"MaXterile 47R"	"MaXterile 60R"	"MaXterile 80R"	"MaXterile 100R"
		Recorder-type : Built in Recording Printer, Sterilization Cycle Data (Date, Temperature, Pressure, Time, Error Status, etc.)			
Capacity		47 Lit	60 Lit	80 Lit	100 Lit
Temp. Range & Accuracy		Room Temp +5℃ to 132℃, ±0.5℃ at 121℃			
Pressure & Gauge		1.2 kgf/cm² at 121℃ / 2.0 kgf/cm² at132℃, 0 ~ 3 kgf/cm²			
Sterilization mode		Solid- or Liquid-mode			
Heating Power/Consumption		2 kW	3 kW	2 kW×2	2 kW×2
Timer & Alarm		60 min, Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy-Control System (Fully Automatic)			
Door & Closing System		Lever-type Sliding Door / Safety Electronic Door Closing System			
Safety Circuit		Over-Temp./-Pressure/-Current protection, Sensor Error Detection			
Printer		Thermal type printer, Record Paper Roll: w58 ×Φ40 mm			
Material		Stainless-steel (#304)-Pressure Vessel, Powder Coated steel-External			
Basket		2ea of Stainless-steel Wire Baskets are Included			
Basket Dimension (mm)		Φ270×h240	Φ320×h240	Φ370×h240	Φ420×h240
Dimension (w×d×h)	Inner (mm)	Φ300×h670	Φ350×h650	Φ400×h650	Φ450×h630
	Outer (mm)	700×470×1080	700×470×1080	810×580×1140	810×580×1140
Packing Size (mm)		840×610×h1,252 mm		950×730×h1,352 mm	
Gross Weight (kg)		117 kg	120 kg	170 kg	170 kg
Electric Reqts.		1Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz		1 Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz 3 Phase with Terminal Block	

(1) With PED(Pressure Equipment Directive) Certification, Φ3.0mm Thickness Tank

Standard-type Cat. No.	230V	DH.WAC05047P	DH.WAC05060P	DH.WAC05080P	DH.WAC05100P
	120V	DH.WAC06047P	DH.WAC06060P	DH.WAC06080P	DH.WAC06100P
	3Phase	-	-	DH.WAC07080P	DH.WAC07100P
Price, Each. ₩					
Built in Recorder-type Cat. No.	230V	DH.WACR2047P	DH.WACR2060P	DH.WACR2080P	DH.WACR2100P
	120V	DH.WACR1047P	DH.WACR1060P	DH.WACR1080P	DH.WACR1100P
	3Phase	-	-	DH.WACR3080P	DH.WACR3100P
Price, Each. ₩					

(2) Without PED(Pressure Equipment Directive) Certification, Φ2.0mm Thickness Tank

Standard-type Cat. No.	230V	DH.WAC05047	DH.WAC05060	DH.WAC05080	DH.WAC05100
	120V	DH.WAC06047	DH.WAC06060	DH.WAC06080	DH.WAC06100
	3Phase	-	-	DH.WAC07080	DH.WAC07100
Price, Each. ₩					
Built in Recorder-type Cat. No.	230V	DH.WACR2047	DH.WACR2060	DH.WACR2080	DH.WACR2100
	120V	DH.WACR1047	DH.WACR1060	DH.WACR1080	DH.WACR1100
	3Phase	-	-	DH.WACR3080	DH.WACR3100
Price, Each. ₩					

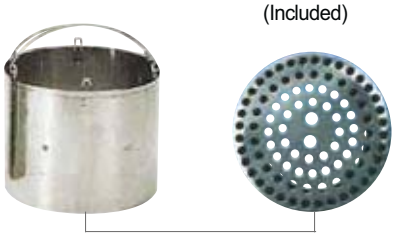
∗ Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 30,000 별도!

Articles	Cat. No	Description

<*Continued From...*DAIHAN® Digital Fuzzy-control Autoclave, "MaXterile™" Standard-/Recorder-type>

(3) Wire Basket Stainless-steel
(Included)



(4) Perforated Bottom Basket, Stainless-steel
(Optional)

(3) Spare Wire Basket, Stainless-steel & Thermal Paper for Recorder

		Ea. Price, ₩
SL.Bas7011	Wire Basket, Φ270×h240mm, **"Bas7011"**, for **47 Lit, "MaXterile 47", "MaXterile 47R"**	
SL.Bas7012	Wire Basket, Φ320×h240mm, **"Bas7012"**, for **60 Lit, "MaXterile 60", "MaXterile 60R"**	
SL.Bas7013	Wire Basket, Φ370×h240mm, **"Bas7013"**, for **80 Lit, "MaXterile 80", "MaXterile 80R"**	
SL.Bas7014	Wire Basket, Φ420×h240mm, **"Bas7014"**, for **100 Lit, "MaXterile 100", "MaXterile 100R"**	
DH.WACR5004	Thermal Paper, 4×Paper Roll for **"MaXterile R"**	

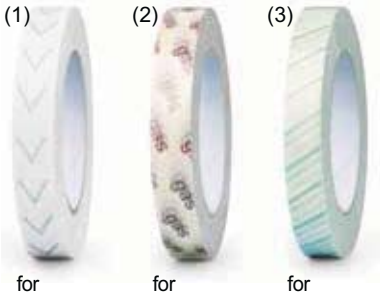
(4) Optional Perforated Bottom Basket, Stainless-steel

		Ea. Price, ₩
DH.WAC20047	Perforated Basket, Φ270×h250mm, **"WAC20047"**, for **47 Lit "MaXterile 47", "MaXterile 47R"**	
DH.WAC20060	Perforated Basket, Φ320×h250mm, **"WAC20060"**, for **60 Lit "MaXterile 60", "MaXterile 60R"**	
DH.WAC20080	Perforated Basket, Φ370×h250mm, **"WAC20080"**, for **80 Lit "MaXterile 80", "MaXterile 80R"**	
DH.WAC20100	Perforated Basket, Φ420×h250mm, **"WAC20100"**, for **100 Lit "MaXterile 100", "MaXterile 100R"**	

Autoclave with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.WAC30047	Validation Service(IQ, OQ), with "MaXterile 47", **"ACV47"**	
DH.WAC30060	, with "MaXterile 60", **"ACV60"**	
DH.WAC30080	, with "MaXterile 80", **"ACV80"**	
DH.WAC30100	, with "MaXterile 100", **"ACV100"**	
DH.WACR0047	Validation Service(IQ, OQ), with "MaXterile 47R", **"ACRV47"**	
DH.WACR0060	, with "MaXterile 60R", **"ACRV60"**	
DH.WACR0080	, with "MaXterile 80R", **"ACRV80"**	
DH.WACR0100	, with "MaXterile 100R", **"ACRV100"**	

Sterilizer, *Accessory*



for Dry-Heat | for EO-Gas | for Auto-Clave

Sterilization Indicator Tape, w19mm×L50m/Roll
For Dry-Heat, EO-Gas, and Steam Sterile/Autoclaving, **멸균 감지 테이프**

∗ Changing Color after Expose to Sterilization Process(Dry-Heat, EO-gas, Steam Sterile)

(1) For Dry-Heat Sterile ∗ Supplied by Kartell® in Italy

		Ea.	Price, ₩
KA.1051	Dry-Heat Sterile Indicator, w19mm×L50m-Roll, White→Brown	1roll	

(2) For EO-Gas Sterile ∗ Supplied by Heinz Herenz® in Germany

		Ea.	Price, ₩
HH.1080551	EO-Gas Sterile Indicator, w19mm×L50m-Roll, Red→Green	1roll	

(3) For Steam Sterile/Autoclaving ∗ Supplied by Heinz Herenz® in Germany

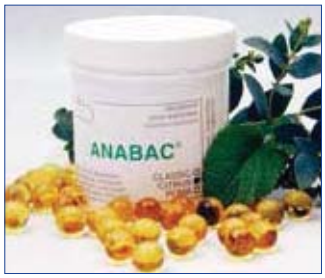
		Ea.	Price, ₩
HH.1080550	Autoclave/Steam Sterile Indicator, w19mm×L50m-Roll, Green→Brown	1roll	

Dry-Heat Sterilizer Indicator Label on Sheet, 160℃/3h, 180℃/30min, Pink ⇒ Brown
For Indicating Sterilizer, Color-Changing : from Pink to Brown, **가열 멸균 감지 라벨**

■ ***Supplied by LMS® in Japan***

∗ Change of Color : Pink ▶ Brown
∗ Changing Time : 30 minutes at 180℃, 3 Hours at 160℃

		Cs.	Price, ₩
AS2.6419.01	Heat-Sterile Label "D-L", w19×L32mm	500ea	



Anabac® Deodorant "Classic" for Autoclaving, 100 Tablets
Ideal for deodorization, Deodorant Capacity : max 200Lit. per One-tablet, **사과향 오토클레이브용 탈취제**

■ ***Supplied by LMS® in Japan***

∗ French Bracing Fragrance
∗ 100 Tablets / Packed in PP/Paper Container
∗ Deodorant Volume : Max 200Lit per 1-Tablet

		Pk.	Price, ₩
AS2.6361.02	Deodorant for Autoclave, Apple, 100 Tablets / a Container	100ea	

Articles	Cat. No	Description

DAIHAN® 21.5 Lit Programmable Bench-top Autoclave "MaXterile™ B", 121~134℃, Pending Class II Medical Device

With Pre- & Post-Vacuum Drying, Class-B Sterilization Cycle, Safety Door Lock System, HEPA Filter, 2 Perforated STS Tray NEW

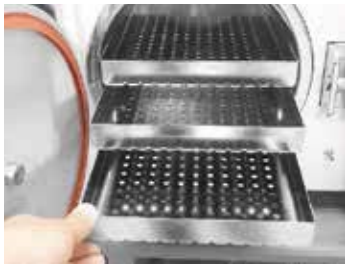
Round Chamber, Max 2.40 bar, **원형챔버 벤치탑 고압 멸균기, 전자식 도어 잠금 시스템**

21.5 Lit Bench-top Autoclave "MaXterile™ B"

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Ideal for Dental Clinical, Medical, Biotechnology, etc.***
- ***Pre-vacuum Air Removal & Post Vacuum Drying for Perfect Sterilizing.***
- ***Safety Door Lock System for User Safety.***
- ***Class-B Sterilization Cycle by EN13060 Standard : Hollow Load Test in compliance with EN13060 & EN 867-5 Standard. Suitable to SAL=10^{-6}CFU, EN556-1 Certificate Sterilization Standard.***

∗ Air Filtration System : HEPA Filter of efficiency up to 99.999% & 0.3 micron size.
∗ Special Steam Condensing Mechanism for User Safety
∗ Manual Top Water Filling(Built in Water Level Sensor). ∗ Optional Built-in Thermal Printer
∗ Efficient Space Saving Compact Size Body and Round Inner Chamber.
∗ Programmable Function : Provide 7-Program Sterilizing Operation Cycles (Pre-set 5 Programs & Customizable 2 Programs)
∗ Intuitive User Interface : LCD & Capacitive Touch Button Controller for User Convenience.
∗ High-performance Microprocessor Controller
∗ Class-B Sterilizing Cycle Process by EN13060 Standard : Pre-vacuum→ Water Filling→ Heating→ Sterilizing→ Exhaust→ Post-vacuum Drying→ End of Cycle

Round Inner Chamber



Sliding Perforated Shelf

(1) STS Perforated Tray

(2) Thermal Printer

Specifications & Ordering information

Spec. \ Model		"MaXterile™ B21"
Sterilizing Cycle-type		Class-B Cycle by EN13060 Standard
Capacity		21.5 Lit
Temp. Range		Room Temp +5℃ to 134℃
Pressure & Gauge		Min -1.00bar, Max 2.40 bar, Built-in Digital Pressure Gauge
Timer & Alarm		60 min, Error status & Timer-end
Display		Digital LCD with Back-Light Function
Controller		Digital PID Control System (Fully Automatic), Touch Button UI
Programmable Function		Pre-set 5 Programs & Customizable 2 Programs
Door-type		Manual Double Lever-type Door Lock System
Trays (Included)		2 Stainless-steel Perforated Tray (216×405×h44mm)
Air Filtration System		Built-in HEPA filter, 0.3㎛ Particle Removal 99.97%
Vacuum Pump		Built-in 11Lit/min Vacuum Pump for Pre-vacuum & Post-vacuum Drying
Air Removal-type		Vacuum & Gravity
Water Filling Tank		4.2Lit, 238×117×h233mm
Safety Circuit		Over-Temp./-Pressure/-Current protection, Sensor Error Detection
Material		Stainless steel-Pressure Vessel, Powder Coated steel-External
Dimension (w×d×h)	Interior	225×425×h225 mm
	Exterior	530×692×h391 mm
Power Consumption		2,300 W
Net Weight		56 kg
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz
Cat. No.	230V	**DH.WACB0021**
	120V	**DH.WACB0121**
Price, Each. ₩		

∗ **Other Specifications are available upon Customer's Request.**

Spare Stainless-steel Perforated Tray

Ea. Price, ₩

DH.WACB1001 (1) STS Perforated Tray, 216×405×h44mm

Optional Thermal Printer

Ea. Price, ₩

DH.WACP001 (2) Thermal Printer, Built-in type, 76.5×72mm
DH.WACR5004 Thermal Paper, 4×Paper Rolls, w58×Φ40mm, for Thermal Printer

Bench-top Autoclave with Validation (IQ, OQ) Service

Ea. Price, ₩

DH.WACB5021 Validation Service(IQ, OQ), with **"MaXterile B21"**

DAIHAN® 25 & 40Lit Programmable Bench-top Steam Sterilizer "MaXterile™ BT", 110~135℃, Class-II Medical Device(NIDS)

With Auto-Front Door, Pre- & Post-Vacuum System, Class-B Sterilization, Auto-Microprocessor Control, and Dual Door Lock SQUARE Chamber Autoclave, 2 Perforated STS Tray, HEPA Filter, Max 2.30 bar, 사각챔버 벤치탑 고압 멸균기 NEW

25 & 40 Lit Bench-top Steam Sterilizer "MaXterile™ BT"

- ***Made in Korea*** ■ ***PL(Product Liability)***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Class-B Sterilization Cycle by EN13060-2 Standard : Pre Vacuum Air Removal → Water Filling → Heating → Sterilizing → Ventilation → Post Vacuum Drying → End***
- ***STS Square Chamber for Corrosion Resistance and Maximum Working Space***

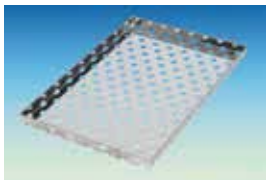
* Ideal for Dental Clinical, Medical, Biotechnology, etc.
* Full Automatic Process Cycle by High-performance Microprocessor Controller
* Built-in Separate Water Reservoir Supplies Water Automatically
* Self-diagnostic and Safety System :
  - Display Error Codes and Audible Alarm
  - Automatic and Manual Door Lock System
  - Over Pressure Release Valve
  - Over Temp Protector with Thermostat
* Intuitive User Interface(LCD) & Indicator of Working(LED Lamp)

MODE	Temperature (℃)	Pressure (bar)	Sterilizing Time (min)	Drying Time (min)
Unwrapped 1	121	1.1	20	30
Unwrapped 2	134	2.1	5	30
Wrapped 1	121	1.1	30	30
Wrapped 2	134	2.1	15	30
Liquid	121	1.1	20	0
Bowie Dick	134	2.1	4	5
User Program	110 - 135	0.4 - 2.3	4 - 30	0 - 60

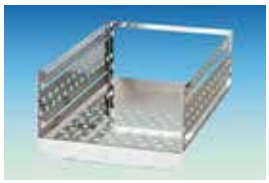
Program Cycle

Square Inner Chamber

Sliding Perforated Shelf



(1) STS Perforated Tray



(2) STS Removable Rack

(3) HEPA Filter-kit, 0.3㎛

(5) Thermal Printer

(4) Movable Stand

Specifications & Ordering information

Spec. \ Model		"MaXterile™ BT25"	"MaXterile™ BT40"
Capacity		25 Lit	40 Lit
Water Filling Tank		5 Lit (Reservoir)	
Sterilizing Cycle-type		Class-B Cycle by EN13060-2 Standard	
Temp. Range		110 ~ 135℃	
Pressure & Gauge		0.4 ~ 2.3 bar, Built-in Analog & Digital Pressure Gauge	
Timer & Alarm		Error Status & Timer-end	
Controller		Microprocessor PID Control System(Fully Automatic) with LCD Monitor	
Programmable Function		Pre-set 6 Programs (Customizable 5- & Fixed Bowie Dick 1- Program)	
Door Lock		Automatic Wheel Inter Locking with One Touch Sliding Handle	
Air Filtration System		Built-in HEPA Filter, 0.3㎛ Particle Removal 99.97%	
Vacuum Pump		Built-in Vacuum Pump(33LPM, 580mmHg) for Pre-vacuum & Post-vacuum Drying	
Air Removal-type		Vacuum	
Tray (Included)		2 Stainless-steel Perforated Tray	
Safety Circuit		Over-Temp / -Pressure / -Current protection, Sensor Error Detection	
Material		Interior : Stainless-steel 304 Polished, Exterior : Epoxy Powder Coated Steel	
Dimension (w×d×h) & Weight	Interior	270×420×h230 mm	300×480×h300 mm
	Exterior	495×689×h460 mm, 60 kg	527×787×h530 mm, 70 kg
	Packing	580×750×h580 mm, 75 kg	650×820×h740 mm, 85 kg
Power Consumption		2.5 kW	
Electric Reqts.		110 V, 60 Hz or 220 V, 50 / 60 Hz, 1 Phase	
Cat. No.	220V	DH.SteB8001	DH.SteB8002
	110V	DH.SteB8011	DH.SteB8012
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ 운임 별도!

Spare Accessory

Ea. Price, ₩

DH.SteBA1010	(1) STS Perforated Tray , 255×365×h25 mm , for **"MaXterile BT25"**
DH.SteBA1015	, 285×405×h30 mm , for **"MaXterile BT40"**
DH.SteBA1011	(2) STS Removable Rack, 260×385×h155mm, for **"MaXterile BT25"**
DH.SteBA1016	, 290×425×h185mm, for **"MaXterile BT40"**
DH.SteA1015	(3) Replacement HEPA Filter-kit, 0.3㎛

Optional Accessory

Ea. Price, ₩

DH.SteBA1013	STS Wire Tray, 260×370 mm, for **"MaXterile BT25"**
DH.SteBA1017	, 273×410 mm, for **"MaXterile BT40"**
DH.SteBA1026	(4) Movable Stand with 1 Drawer, 580×700×h850 mm
DH.SteA1005	(5) Thermal Printer, Paper Roll, **"STEA1005"**
DH.SteA1006	Thermal Paper Package, 4 Paper Roll, for **"STEA1005"**

Bench-top Autoclave with Validation (IQ, OQ) Service

Ea. Price, ₩

DH.SteB5025	Validation Service(IQ, OQ), with **"MaXterile BT25"**
DH.SteB5040	, with **"MaXterile BT40"**

Articles	Cat. No	Description

DAIHAN® 90Lit Front Door Steam Sterilizer "MaXterile™ FL90", 110~135℃, Class-II Medical Device(NIDS) NEW

With Built-in Steam Generator, Water Ejector Vacuum Pump, Thermal Printer, 2 Perforated STS Tray, HEPA Filter
SQUARE Chamber Autoclave, Pre- & Post-Vacuum Drying, Auto-Door Lock & Alarm System, Max 2.30 bar, **사각챔버/전면문 고압 멸균기**

90Lit Front Door Steam Sterilizer "MaXterile™ FL90"

Vertical Sliding Door & Square Chamber

- ■ ***Made in Korea*** ■ ***PL(Product Liability)***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ■ ***Class-B Sterilization Cycle by EN285 Standard : Pre-vacuum → Steam Generation → Steam Injection → Sterilizing → Exhaust → Post-vacuum Drying → End of Cycle***

* Ideal for Dental Clinical, Medical, Biotechnology, etc.
* Pre-vacuum Air Removal & Post Vacuum Drying for Perfect Sterilizing
* Built-in Steam Generator Supplies Water Automatically and Sprays Steam into the Chamber
* Water Ejector Vacuum Pump : Effective for Fluid Control(1800L/hr)
* Air Filtration System : 0.3㎛ HEPA Filter of Efficiency up to 99.97%
* Automatic Dual Door Locking System for User Safety.
* Programmable Function : Provides 6-Program & User Customizable 1 Program
* Intuitive User Interface(LCD) & Indicator of Working(LED Lamp)
* Self-Diagnostic and Display Error Codes
* Visual and Audible Alarm System
* Sturdy and Convenient Locking Wheel helps to Move Easily
* Built-in Thermal Printer

Specifications & Ordering information

Spec. \ Model		"MaXterile™ FL90"
Capacity		90 Lit
Sterilizing Cycle-type		Class-B Cycle by EN-285 Standard
Temp. Range		110~135℃
Pressure & Gauge		0.4 ~ 2.3 bar, Built-in Analog & Digital Pressure Gauge
Timer & Alarm		60 min, Error Status & Timer-end Alarm
Display		Digital LCD with Back-Light Function & LED Lamp (Working Process)
Controller		Microprocessor Digital PID Control System (Full Automatic)
Programmable Function		Pre-set 6 Programs (Customizable 5- & Fixed Bowie Dick 1- Program)
Door-type		Manual Vertical Sliding Door, Automatic Door Locking System
Chamber		Reinforced and Electro Polished Square Chamber with Double Jacket
Tray (Included)		2 Stainless-steel Perforated Tray
Safety Circuit		Over-Temp / -Pressure / -Current protection, Sensor Error Detection
Material		Interior : Stainless-steel 304 Pressure Vessel, Exterior : Stainless-steel
Dimension (w×d×h) & Weight	Interior	338×712×h378 mm
	Exterior	625×990×h1300 mm, 280 kg
	Packing	850×1100×h1400 mm, 295 kg
Power Consumption		6.0 kW
Electric Reqts.		220 V 50 / 60 Hz, 1 Phase
Cat. No.		DH.SteF8001
Price, Each. ₩		

* Other Specifications are available upon Customer's Request.

※ **운임 별도!**

MODE	Temperature (℃)	Pressure (bar)	Sterilizing Time (min)	Drying Time (min)
Unwrapped 1	121	1.1	20	30
Unwrapped 2	134	2.1	5	30
Wrapped 1	121	1.1	30	30
Wrapped 2	134	2.1	15	30
Liquid	121	1.1	20	0
Bowie Dick	134	2.1	4	5
User Program	110 - 135	0.4 - 2.3	4 - 30	0 - 60

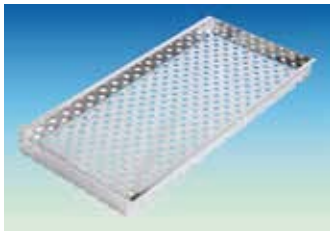
Program Cycle

Spare Accessory

		Ea. Price, ₩
DH.SteFA1001	(1) STS Perforated Tray, 323×667×h54 mm for **"MaXterile FL90"**	
DH.SteA1006	(2) Thermal Paper Package, 4 Paper Roll for Thermal Recorder	
DH.SteA1016	Replacement HEPA Filter-kit	

Front Loading Sterilizer with Validation (IQ, OQ) Service

		Ea. Price, ₩
DH.SteF5001	Validation Service(IQ, OQ), with **"MaXterile™ FL90"**	



(1) STS Perforated Tray

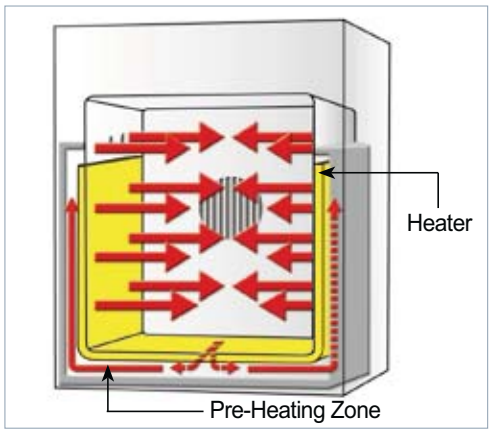
(2) Thermal Paper Roll

DAIHAN® 32 & 50Lit, Dry Heat Sterilizer "MaXterile™ DH", Up to 250℃, Pending Class-II Medical Device(NIDS) NEW
With 3-Side Pre-Heating Zone, Digital PID Control, Jog-Dial & Push Button, and 2 Wire Shelf, 건열 멸균기

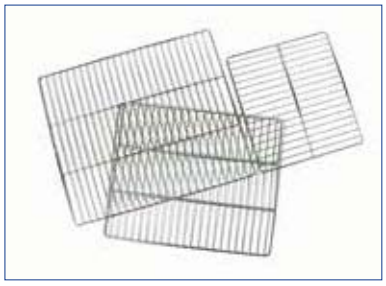
Dry Heat Sterilizer "MaXterile™ DH"

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Optimized Air Flow by Forced-air Mechanism***
- ***3-Side Heating Zone : The Best Temp Uniformity & Accuracy by High Performance Heating Mechanism***

∗ Ideal for Dental Clinical, Medical, Biotechnology, etc.
∗ Digital PID Control System Implementing Superior Temperature Accuracy
∗ Patented Jog-Dial Control System
∗ Space Saving Compact Size
∗ Efficient Square Inner Chamber
∗ Alarm Function : Error Status and Timer-end



3-Side Heating Zone Forced-air Mechanism



(1) STS Wire Shelf (Included)

Specifications & Ordering information

Spec. \ Model		"MaXterile™ DH-30"	"MaXterile™ DH-50"
Capacity		32 Lit	50 Lit
Heater Power		500 W	650 W
Temp.	Range	Room Temp +5℃ to 250℃	
	Fluctuation	± 0.3℃ at 100℃, ± 0.5℃ at 180℃,	
	Variation	± 1℃ at 100℃, ± 2.0℃ at 180℃	
	Sensor	PT100	
Temp. Resolution		± 0.1℃	
Circulation		Forced-air Type	
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button	
Display		Digital LCD with Back Light	
Timer		99hr 59min (Delay / Continuous Function)	
Material	Internal	Stainless-steel (#304)	
	External	Powder Coated Steel	
	Insulation	Glass Wool	
Shelf (Included)		2 Stainless-steel Wire Shelf Load per Shelf : 16 kg	
Safety Device		Over Temp and Over Current Protector, Sensor Error Detector	
Dimension (w×d×h)	Interior	312×290×h360 mm	370×350×h420 mm
	Exterior	458×477×h624 mm	518×537×h701 mm
	Packing	568×592×h698 mm	628×652×h775 mm
Net Weight		32 kg	40 kg
Shipping Weight		39 kg	53 kg
Power Consumption		550 W	700 W
Electric Reqts.		230 V, 50 / 60 Hz	
Cat. No.		**DH.SteD0003**	**DH.SteD0005**
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request. ※ 운임 별도!

Spare Stainless-steel Wire Shelf

		Ea. Price, ₩
DH.WIG12032	(1) Wire Shelf, 280×260 mm, for 32 Lit, **"IGSN032"**	
DH.WON11050	, 340×310 mm, for 50 Lit, **"ONS050"**	

Dry Heat Sterilizer with Validation (IQ,OQ) Service

		Ea. Price, ₩
DH.SteD5003	Validation Service(IQ, OQ), with **"MaXterile DH30"**	
DH.SteD5005	, with **"MaXterile DH50"**	

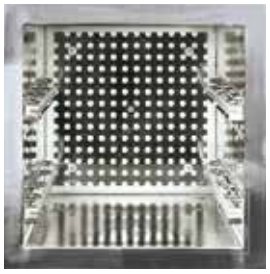
Articles	Cat. No	Description

DAIHAN® 56Lit Low Temp Plasma Sterilizer "MaXterile™ PS60", Max. 60℃, Class-II Medical Device(NIDS) NEW

Suitable for Medical Instrument, 50% Hydrogen Peroxide Injection, Microprocessor 7" Touch Screen Controller
Front Door / SQUARE Chamber, with 2 Perforated STS Tray, 저온 플라즈마 멸균기

56Lit Low Temp Plasma Sterilizer "MaXterile™ PS60"

Front Door Open & Perforated Tray (Included)



Square Inner Chamber

(2) 50% H_2O_2 Bottle

(3) Air Filter-kit

(4) Movable Stand

- ***Made in Korea*** ■ ***PL(Product Liability)***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Speedy Sterilization Time within 30-60min, Economical Cycle Cost***
- ***Environment Friendly : H_2O_2 Decomposes to Oxygen and Vapor Water, Leaving No Residues***

* Ideal for Sterilization of Medical Instruments that are Vulnerable to High Temp, Steam & Pressure such as Surgical Endoscopes, Catheter, Electric Surgical Instruments with Motor
* Lumen Test Certification by EN13060 / EN867-5 :
  - Flexible Lumen : Φ1×12,000 mm
  - Stainless-steel Lumen : Φ1×1,000 mm
  - Single through Lumen : Φ1×1,500 mm
* Special H_2O_2 Injection System
* High-performance Microprocessor 7-inch Touch Screen Controller and LCD Display
* Self-diagnose and display Error Code ; Stops Operation and Vents in case of Any Malfunction
* Automatic Door Locking System for User Safety
* Economical because of Using General 50% Hydrogen Peroxide(H_2O_2)
* Efficient in Using Space with Compact Size Body & Squared Inner Chamber
* Processing for Perfect Sterilizing :
  • Pre-Chamber Cleaning : Pre-Vacuum → H_2O_2 Injection → Diffusion
  • Plasma Sterilization : Vacuum → Plasma Processing & Sterilization → H_2O_2 Injection → Diffusion
  • Post Chamber Cleaning : Vacuum → Plasma Processing → Venting
* Built-in Thermal Printer

Specifications & Ordering information

Spec. \ Model		"MaXterile™ PS60"
Capacity		56 Lit
Sterilization Temp		Max. 60℃
Sterilization Agent		50% Hydrogen Peroxide
Vacuum Capacity		400 Lit / min
Operating Modes		Quick / Standard / Intense / Vacuum Test
Ambient Working Condition		Pressure : 700 ~ 1060 hPa, Temp : 10 ~ 40℃, Humidity : 30 ~ 75%
Controller & Display		Microprocessor 7" LCD Touch Screen Controller (Temp, Timer, Program Cycle, Vacuum)
Door-type		Push Interlocking Door System
Tray (Included)		2 Stainless-steel Perforated Tray
Safety Circuit		Over-Temp Protection, Current Leakage Breaker
Material		Interior : Reinforced & Electro Polished 304, Exterior : Stainless-steel 304
Dimension (w×d×h) & Weight	Interior	285×700×h285 mm
	Exterior	680×880×h890 mm, 172 kg
	Packing	720×900×h930 mm, 190 kg
Power Consumption		3.0 kW
Electric Reqts.		220 V, 50 / 60 Hz, 1 Phase
Cat. No.		DH.SteP8001
Price, Each. ₩		

* Other Specifications are available upon Customer's Request. ※ 운임 별도!

Spare Accessory

		Ea. Price, ₩
DH.StePA1001	(1) STS Perforated Tray, 250×660 mm for **"MaXterile PS60"**	
DH.StePA1011	(2) Bottle with Hydrogen Peroxide(50%), 100 ml	
DH.StePA1012	Spare Bottle Only, Φ55×124 mm	
DH.SteA1006	Thermal Paper Package, 4 Paper Roll for Thermal Recorder	
DH.SteA1016	(3) Replacement Air Filter-kit	

Optional Accessory

		Ea. Price, ₩
DH.StePA1015	Oil Mist Trap for **"MaXterile PS60"**	
DH.StePA1017	Oil for Vacuum Pump, 1Lit for **"MaXterile PS60"**	
DH.StePA1025	(4) Movable Stand with 1 Drawer, 680×865×h610 mm	
DH.StePA1030	Biological Indicator, 100ea.	
DH.StePA1031	Chemical Indicator, 250sheet.	

DAIHAN® 130Lit Low Temp Plasma Sterilizer "MaXterile™ PS130", Max. 60℃, Class-II Medical Device(NIDS) NEW

Suitable for Medical Instrument, 50% Hydrogen Peroxide Injection, Microprocessor 10.4" Touch Screen Controller
Front Door / SQUARE Chamber, with Emergency Stop Button, 2 Perforated STS Tray, 저온 플라즈마 멸균기

130Lit Low Temp Plasma Sterilizer "MaXterile™ PS130"

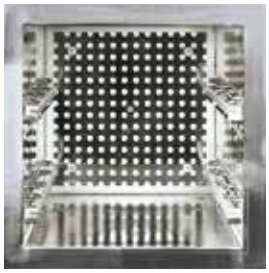
- ***Made in Korea*** ■ ***PL(Product Liability)***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Speedy Sterilization Time within 30-60min, Economical Cycle Cost***
- ***Environment Friendly : H_2O_2 Decomposes to Oxygen and Vapor Water, Leaving No Residues***

* Ideal for Sterilization of Medical Instruments that are Vulnerable to High Temp, Steam & Pressure such as Surgical Endoscopes, Catheter, Electric Surgical Instruments with Motor
* Lumen Test Certification by EN13060 / EN867-5 :
  - Flexible Lumen : Φ1×12,000 mm - Stainless-steel Lumen : Φ1×1,000 mm
  - Single through Lumen : Φ1×1,500 mm
* Special H_2O_2 Injection System
* High-performance Microprocessor 10.4-inch Touch Screen Controller and LCD Display
* Self-diagnose and display Error Code ; Stops Operation and Vents in case of Any Malfunction
* Automatic Door Locking System for User Safety
* Economical because of Using General 50% Hydrogen Peroxide(H_2O_2)
* Efficient in Using Space with Compact Size Body & Squared Inner Chamber
* Processing for Perfect Sterilizing :
  - Pre-Chamber Cleaning : Pre-Vacuum → H_2O_2 Injection → Diffusion
  - Plasma Sterilization : Vacuum → Plasma Processing & Sterilization → H_2O_2 Injection → Diffusion
  - Post Chamber Cleaning : Vacuum → Plasma Processing → Venting
* Built-in RS 232C & USB Memory, LAN Port * Foot Pedal for Easy Door Open Function
* Built-in Thermal Printer

Specifications & Ordering information

Spec. \ Model		"MaXterile™ PS130"
Capacity		130 Lit
Sterilization Temp		Max. 60℃
Sterilization Agent		50% Hydrogen Peroxide
Vacuum Capacity		25 m³ / hr
Operating Modes		Quick / Standard / Intense / Vacuum Test
Ambient Working Condition		Pressure : 700 ~ 1060 hPa, Temp : 10 ~ 40℃, Humidity : 30 ~ 75%
Controller & Display		Microprocessor 10.4" LCD Touch Screen Controller (Temp, Timer, Program Cycle, Vacuum)
Door-type		Automatic Interlocking Door System
Trays (Included)		2 Stainless-steel Perforated Tray
Safety Circuit		Over-Temp / Protection, Current Leakage Breaker
Material		Interior : Reinforced & Electro Polished 304, Exterior : Stainless-steel 304
Dimension (w×d×h) & Weight	Interior	454×707×h404 mm
	Exterior	750×980×h1600 mm, 350 kg
	Packing	900×1150×h1800mm, 360 kg
Power Consumption		3.3 kW
Electric Reqts.		220 V, 50 / 60 Hz, 1 Phase
Cat. No.		**DH.SteP8002**
Price, Each. ₩		

* Other Specifications are available upon Customer's Request. ※ 운임 별도!


Square Inner Chamber

Built-in Port

(2) 50% H_2O_2 Bottle

(3) Air Filter-kit

(4) Oil Mist Trap

(5) (6)
Indicator

Spare Accessory

		Ea. Price, ₩
DH.StePA1006	(1) STS Perforated Tray, 435×650×h30mm for **"MaXterile PS130"**	
DH.StePA1011	Bottle with Hydrogen Peroxide(50%), 100 ml	
DH.StePA1012	(2) Spare Bottle Only, Φ55×124 mm	
DH.SteA1006	Thermal Paper Package, 4 Paper Roll for Thermal Recorder	
DH.SteA1016	(3) Replacement Air Filter-kit	

Optional Accessory

		Ea. Price, ₩
DH.StePA1016	(4) Oil Mist Trap for **"MaXterile PS130"**	
DH.StePA1018	Oil for Vacuum Pump, 1Lit for **"MaXterile PS130"**	
DH.StePA1030	(5) Biological Indicator, 100ea.	
DH.StePA1031	(6) Chemical Indicator, 250sheet.	

DAIHAN Scientific

Stirrer

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Magnetic Stirrer, Magnetic Stirring *New* ····· P. 221~224
, Magnetic Stirring with Heating P. 225~227
Overhead Stirrer, High Speed-type *New* ····· P. 229~231
, High Torque-type *New* ····· P. 232~235
, Jar Tester/6-paddle Stirrer ····· P. 236
, Accessory (Impeller/Rod/Stand) P. 237~243

• Magnetic Stirrer

"MS-12D" "MS-20D"
"MS-20A"

• Magnetic Stirrer Multi-point

"MS-MP8"

• Magnetic Stirrer with Heating

"MaXtir™ MSH500"

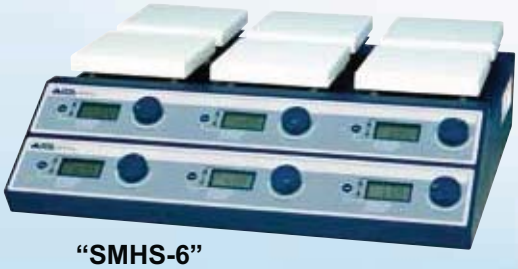
• Overhead Stirrer High Speed

"OVS-S05 Package-Set"

• Overhead Stirrer High Torque

"OVS-G30" Unit

• Magnetic Stirrer with Heating Multi-point



"SMHS-6"

Wisd 120×120 Mini Hi-Quality Digital Magnetic Stirrer "MS-12D", Max. 2,500rpm NEW

With Tempered Glass Plate & PP Housing, BLDC-motor, Digital LED Display, Waterproof, Max. 2Lit(H_2O), 소형 디지털 자력교반기

120×120mm Mini Magnetic Stirrer "MS-12D"

- ***Made in Korea*** ***PL (Product Liability) Insurance***
- ***High Performance Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost.***
- ***Outstanding Chemical Resistance due to Tempered Glass Plate(120×120mm) and PP Housing***
- ***Higher Speed Range from 100 ~ 2,500 rpm*** ***Waterproof Structure***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

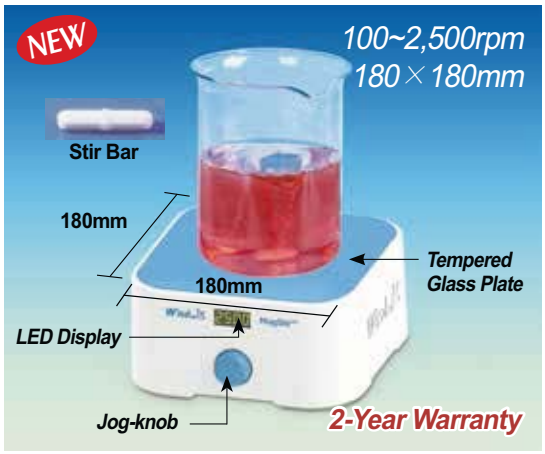
∗ Digital Speed LED Display. ∗ Electronically Controlled Motor for more Capacity
∗ Includes 1ea×3cm Stirring Bar ∗ Can be used with up to 5cm bar

Specifications & Ordering information

Spec. \ Models		"MS-12D" 120×120mm Plate
Stirring Capacity		Max. 2Lit (H_2O)
Motor Rating(Input/Output)		6 / 3W
Speed Range & Motor		100~2,500rpm, High Performance Brushless DC-motor
Controller & Display		Digital PID Control with Jog-knob & Digital LED display
Stirring Bar		3cm bar-included, Usable : up to 5cm bar
Material		Tempered Glass Plate(5mm thick) & PP Housing
Dimension		Plate : 120×120mm, Body : 136×136×h50.5mm
Weight		0.5kg
Electrical Reqts.		DC 12V, with AC 230V Adapter, 50/60Hz
Cat. No.	230V	DH.StiM012
	120V	DH.StiM012.1
Price, Set. ₩		

Wisd 180×180 Midi Hi-Quality Digital Magnetic Stirrer "MS-18D", Max. 2,500rpm NEW

With Tempered Glass Plate & PP Housing, BLDC-motor, Digital LED Display, Waterproof, Max. 5Lit(H_2O), 미디 디지털 자력교반기



180×180mm Midi Magnetic Stirrer "MS-18D"

- ***Made in Korea*** ***PL (Product Liability) Insurance***
- ***High Performance Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost.***
- ***Outstanding Chemical Resistance due to Tempered Glass Plate(180×180mm) and PP Housing***
- ***Higher Speed Range from 100 ~ 2,500 rpm*** ***Waterproof Structure***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

∗ Digital Speed LED Display. ∗ Electronically Controlled Motor for more Capacity
∗ Includes 1ea×3cm Stirring Bar ∗ Can be used with up to 5cm bar

Specifications & Ordering information

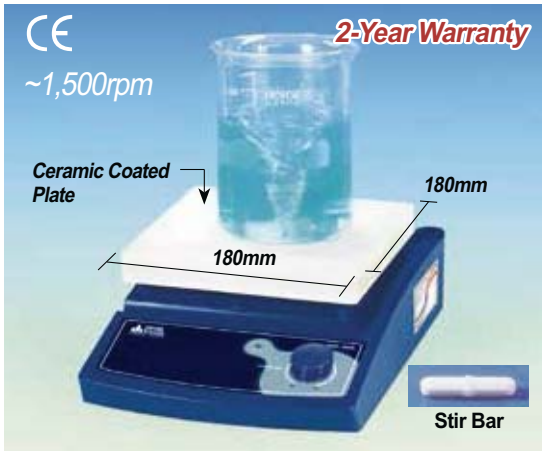
Spec. \ Models		"MS-18D" 180×180mm Plate
Stirring Capacity		Max. 5Lit (H_2O)
Motor Rating(Input/Output)		12 / 6W
Speed Range & Motor		100~2,500rpm, High Performance Brushless DC-motor
Controller & Display		Digital PID Control with Jog-knob & Digital LED display
Stirring Bar		3cm bar-included, Usable : up to 5cm bar
Material		Tempered Glass Plate(5mm thick) & PP Housing
Dimension		Plate : 180×180mm, Body : 193×193×h80.5mm
Weight		1.6kg
Electrical Reqts.		DC 12V, with AC 230V Adapter, 50/60Hz
Cat. No.	230V	DH.StiM018
	120V	DH.StiM018.1
Price, Set. ₩		

Articles	Cat. No	Description

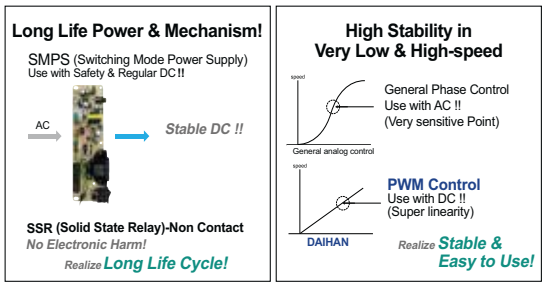
DAIHAN® Standard Digital & Analog Magnetic Stirrer "MS-20", 180×180mm Ceramic-Coated Plate, Max. 1,500rpm

With Precise Speed Control, with Certi. & Traceability, Max. 20 Lit, **디지털/아날로그 자력교반기, 세라믹 코팅 플레이트**

A. Digital Magnetic Stirrer "MS-20D"



B. Analog Magnetic Stirrer "MS-20A"



Specialized Features of "MS-20A"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ceramic Coated Plate-Chemical/Acid Resistance***
- ∗ Ideal for Heat-sensitive Procedures such as Microbiology and Biochemistry Applications
- ∗ Mixing for Chemical, Laboratory, Pharmaceutical Materials
- ∗ Smart Design of Body made by Aluminum Die-Casting
- ∗ Powerful Motor for Stirring Quantities of up to 20Lit (Water)
- ∗ Free Voltage (AC 80V ~ 240V, 50 / 60Hz) by SMPS

A. Digital Microprocessor Control System "MS-20D"

- ***Digital Feedback Control by High-Performance Microprocessor***
- ***Patented Jog-Shuttle Control System***
- ∗ Digital LCD Display with Back-Light Function
- ∗ Storage function for the set values : RPM and Time
- ∗ Digital Timer Function : 99hr 59min(with Continuous run.)
- ∗ Alarm Function : Error Status and Timer-End
- ∗ Locking Mode Supported for Experimental Safety (Jog-shuttle input blocked)

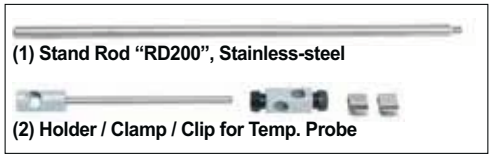
B. Analog PWM Control System "MS-20A"

- ∗ Superior Linearity for the Control of Stirring Speed by Specially Designed Control Circuitry (PWM Control)
- ∗ Long Life Power & Mechanism ∗ High Stability in Very Low & High-speed

Specifications & Ordering information

Spec. \ Model		A. "MS-20D" Digital-type	B. "MS-20A" Analog-type
Plate Size		180×180mm	
Stirring Capacity (H_2O)		Max. 20Lit	
Speed Range		80 ~ 1,500 rpm	Max. 1,500 rpm
Motor Rating		9 / 4 W	
Speed Accuracy (%)		± 5	-
Speed Control Resolution		5 rpm	-
Timer & Alarm		99hr 59min, Error status & Timer-end	-
Display		Digital LCD with Back-Light	-
Controller		Digital Feedback Controller with Jog Shuttle Switch(Turn+Push)	Superior Linearity PWM Controller
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Permissible Ambient Temp.		Room Temp. +5 ~ 50℃	
Permissible Relative Moisture		85%	
Material	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance)	
	Body	Powder Coated Aluminum	
Dimension (w×d×h)		206×307×99mm	
Weight (kg)		3.1 kg	
Packing Size (w×d×h) & Gross Weight		280×400×200mm	
		5 kg	
Power Consumption		10 W	
Electrical Reqts.		Free Voltage (1 Phase, AC 80 ~ 240 V, 50 / 60 Hz)	
Cat. No.	230V	**DH.WMS03022**	**DH.WMS03122**
	120V	**DH.WMS02022**	**DH.WMS02122**
Price, Each. ₩			

∗ **Other Specifications are available upon Customer's Request.**



Optional Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503036	(1) Stand Rod **"RD200"**, Stainless-steel, screw, Φ12×L450mm, for **"MS-20A/20D"**	
DH.WHP503012	(2) Holder/Clamp/Clip, **"CL220"**, for Temp. Probe	

Articles	Cat. No	Description

DAIHAN® Premium Magnetic Stirrer "MaXtir™ MS500", Shade Motor, Max. 80~1,500 rpm, Max 20Lit

With Large LCD, Solid Ceramic Glass Plate, 200×200mm, Touch-button Controller, Digital Feedback Control, Precise Speed Control

고성능 디지털 자력 교반기, 디지털 피드백 제어, 초강력 쉐이드 모터

Premium Digital Magnetic Stirrer "MaXtir™ MS500"

Controller of "MaXtir™ MS500"

- ■ ***Made in Korea*** ■ ***Ergonomic Design***
- ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Digital Feedback Control by High-Performance Microprocessor***
- ■ ***Brushless Shade Motor & Powerful Magnet ensures Powerful Stirring and Precise Speed Control***
- ■ ***High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean***
- ■ ***Large LCD display for Current and Speed, and Timer***
- ■ ***Patented Controller "Jog-Dial" and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate.***

∗ Mixing for Chemical, Laboratory, Pharmaceutical Materials
∗ Storage Function for the set Values : RPM and Timer
∗ Minimization of Noise and Improved the Product Life
∗ Use of the Special Advanced Insulation for the safety of the Body Temp.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
∗ Large LCD with Back Light Function
∗ Digital Timer Function(99hr 59min)
∗ Ergonomic Design of Body made by Aluminum Die-casting

Specifications & Ordering information

Spec. \ Model		"MaXtir™ MS500"
Material	Body	Powder Coated Aluminum
	Plate	Solid Ceramic Glass Plate, 200×200mm
Stirring Capa.		Max. 20 Lit
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end
Display		Large Digital LCD with Back-Light Function
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.
Stirring Bar		3cm bar-included, Usable : up to 5cm bar
Permissible Temp. & RH %		Room Temp. +5 ~ 50℃, 85% RH
Dimension & Weight		200×332×h114mm, 3.8kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz
Cat. No.	230V	**DH.WMS00500**
	120V	**DH.WMS00501**
Price, Each. ₩		

∗ Other Specifications are available upon Customer's Request.

Optional Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503036	(1) Stand Rod, **"RD200"**, Stainless-steel, screw, Φ12×L450mm	
DH.WHP503012	(2) Holder/Clamp/Clip, **"CL220"**, for Temp. Probe	

Articles	Cat. No	Description

DAIHAN® Digital Multi-point Magnetic Stirrer "MS-MP", 4-/8-Points, Max. 500㎖ per Point

With Digital Feedback Control System, Digital LCD Display, Synchronous Operation, 80~1,200 rpm, with Certi. & Traceability

4-/8-멀티포인트 디지털 자력교반기, 디지털 피드백 컨트롤 시스템

A. Digital 4-Point Magnetic Stirrer "MS-MP4"

B. Digital 8-Point Magnetic Stirrer "MS-MP8"

- ***Made in Korea*** ***CE Certified*** ***PL(Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Ideally Suitable for Use in Incubators and Climatic Chambers***
- ***Excellent for Multi-use and wide range of Sample Testing***
- ***Patented Jog-Shuttle Control System***

∗ Ideal for Heat-sensitive Procedures such as Microbiology and Biochemistry Applications
∗ Synchronous Operation of 4 / 8 Stirring Points
∗ Up to 0.5 Lit. Stirring Capacity per Point
∗ Increased Effectiveness by Microprocessor Control
∗ Digital LCD with Back-Light Function
∗ Digital Timer Function (99 hr 59 min)
∗ Smooth Start and Change of Stirring Speed
∗ Storage Function for the Set Values : RPM and Timer
∗ Extraordinary Mechanical, Physical and Chemical Resistance
∗ Locking Mode supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
∗ Free Voltage (AC 80V ~ 240V, 50 / 60Hz) by SMPS

Specifications & Ordering information

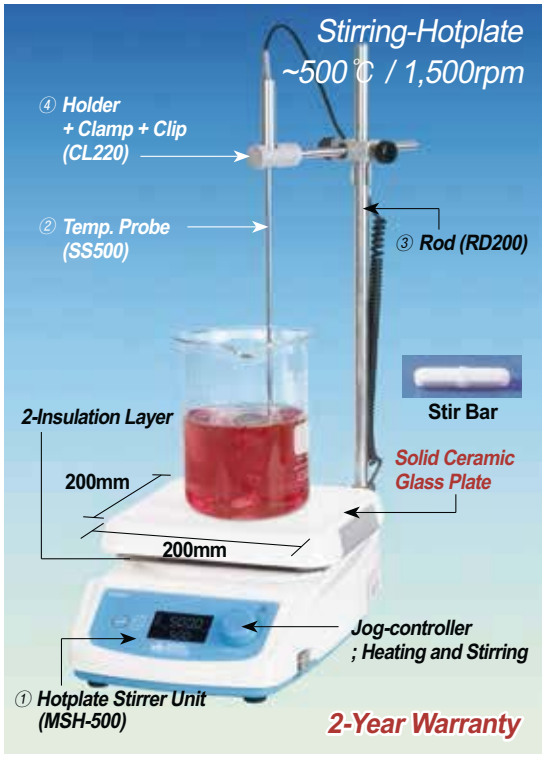
Spec. \ Model		A. "MS-MP4" 4 Stirring Points	B. "MS-MP8" 8 Stirring Points
Number of Stirring Points		4 (2×2) Stirring Points	8 (4×2) Stirring Points
Plate Size		208×215mm	208×415mm
Stirring Capacity (H_2O)		Max. 0.5 Lit per Point	
Distance between Stirring Points		100 mm	
Speed Range		80 ~ 1,200 rpm	
Motor Rating		16/9 W	
Speed Control Resolution		5 rpm	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Shuttle Switch(Turn+Push)	
Stirring Bar		4ea 3cm bar-included, Usable : up to 3cm bar	8ea 3cm bar-included, Usable : up to 3cm bar
Permissible Ambient Temperature		Room Temp. +5 ~ 50℃	
Permissible Relative Moisture		85%	
Material	Plate	Stainless-steel (#304)	
	Body	Power Coated Steel	
Dimension (w×d×h)		208×280×75mm	208×480×75mm
Weight		2.5 kg	3.5 kg
Others		CE Certified, PL(Product Liability) Insurance Storage Function (RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) Alarm (Error Status and Timer-end)	
Packing Size (w×d×h) & Gross Weight		300×330×180mm	330×540×180mm
		6 kg	
Power Consumption		20 W	
Electrical Reqts.		Free Voltage (1 Phase, AC 80 ~ 240 V, 50 / 60 Hz)	
Cat. No.	230V	DH.WMS03036	DH.WMS03038
	120V	DH.WMS02036	DH.WMS02038
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

DAIHAN® 500℃ High-Temp Premium Hotplate Stirrer "MaXtir™ MSH500", Solid Ceramic Glass Plate, 200×200mm

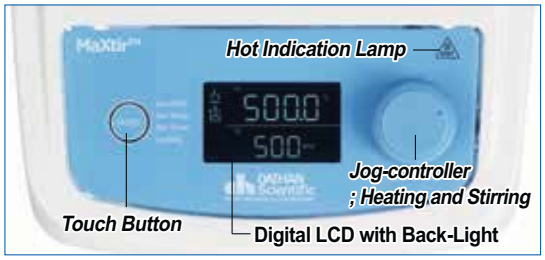
With Large LCD, Optimum Insulation Layer. Accurate Temp. Control, Touch-button Controller, Hot-Top Indicator, 80~1,500rpm

고온용 디지털 가열 자력 교반기, 최적의 방열구조, 디지털 피드백 온도 제어, 내열성/내화학성/내산성 솔리드 세라믹 글라스 플레이트



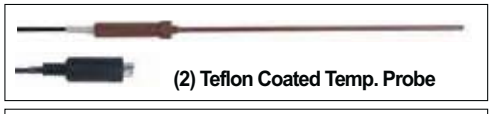
A. "MaXtir™ MSH500" Package-set

B. "MaXtir™ MSH500" Unit only



Controller of "MaXtir™ MSH500" model

(1) Stainless-steel Temp. Probe


(2) Teflon Coated Temp. Probe

(3) Stand Rod "RD200", Stainless-steel

(4) Holder / Clamp / Clip for Temp. Probe

- ■ ***Made in Korea*** ■ ***PL (Product Liability) Insurance*** ■ ***Ergonomic Design***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean***
- ■ ***Optimum Insulation Fourfold Layer : BTU + Ceramic Paper + 2 SUS Insulation Layer***
- ■ ***Brushless Shade Motor & Powerful Magnet ensures Powerful Stirring and Precise Speed Control, Minimization Noise***
- ■ ***Maximum Temperature of 500℃*** ■ ***Microprocessor PID control***
- ■ ***Patented Controller "Jog-Dial" and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate with Back-Light Function***
- ■ ***2 Internal K-type Temp. Sensor Operating Independently : 1 Temp. Control Sensor for Temperature Accuracy and 1 Over Temp. Detection Sensor for User Safety***
- ■ ***Hot Top Indicator LED Lamp : Hot Surface(Over 50℃) Warning Lamp for User Safety***

∗ Excellent for Sample Drying and most General Lab Heating Applications
∗ User's Self -Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±20.0℃)
∗ Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
∗ Storage Function for the set Values : Temp. and Timer
∗ Minimization of Noise and Improved the Product Life
∗ Use of the Special Advanced Insulation for the safety of the Body Temp.
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

Spec. \ Model		A. "MaXtir™ MSH500" (Package-set)	B. "MaXtir™ MSH500" (Unit Only)
Material	Body	Powder Coated Aluminum	
	Plate	Solid Ceramic Glass Plate, 200×200mm	
Stirring Capa.		Max. 20 Lit	
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Temp. Range & Accuracy		Max. 500℃, ±0.3℃ at Set Temperature	
Temp. Resolution		0.1 ℃-Display, 0.5 ℃-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power / Consumption		850W	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Safety Circuit		Over Temp. Protection, Hot Top Indicator LED Lamp	
included Standard Acc.		1ea Stir Bar, ②Temp. Probe ③Rod ④Holder+Clamp	1ea Stir Bar
Permissible Temp. & RH %		Ambient +5 ~ 50℃, 85% RH	
Dimension & Weight		200×332×h114mm, 3.8kg	
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz, with Cord/Plug	
Cat. No.	230V	DH.WMH00500	DH.WMH01500
	120V	DH.WMH00501	DH.WMH01501
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

Component of Package-set

∗ Package-set : ① Hotplate Stirrer Unit ② **"SS500"** PT100 External / Direct Contact Temp. Probe,
③ **"RD200"** Stainless-steel Support Rod Φ12×L450mm
④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

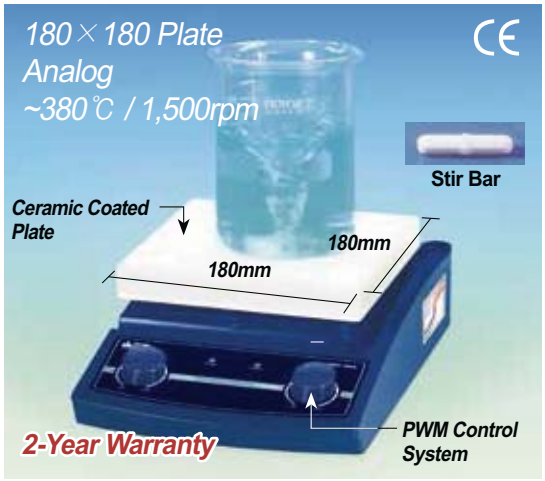
Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503060	(1) External / Direct Contact Temp. Probe, **"SS500"**, Stainless-steel, Φ4×L250mm, Cable L190mm	
DH.WHP503061	(2) External / Direct Contact Temp. Probe, **"SS510"**, **Teflon Coated**, Φ4×L250mm, Cable L190mm,	
DH.WHP503036	(3) Stand Rod **"RD200"**, Stainless-steel, Φ12×L450mm, 1.5p screw, for **"MaXtir™ MSH500"**	
DH.WHP503012	(4) Holder/Clamp/Clip, **"CL220"**, for Temp. Probe	

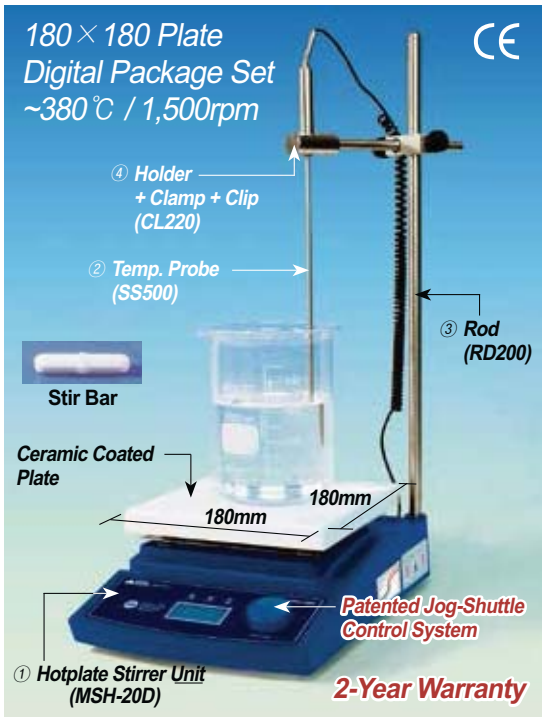
DAIHAN® 380℃ Standard Analog & Digital Hotplate Stirrer "MSH-A" & "MSH-D", Ceramic-Coated Plate, 80~1,500 rpm

180×180mm or 260×260mm Plate, with Accurate Temp. Control, Superior Temp. Uniformity, with Certi. & Traceability

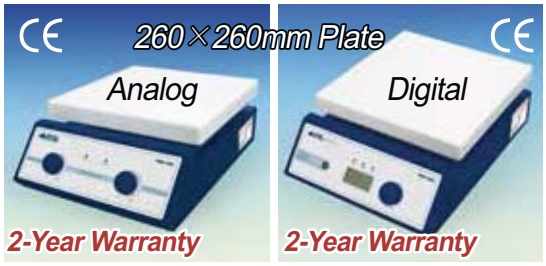
아날로그 & 디지털 가열 자력 교반기, 우수한 온도제어/온도균일성, 세라믹 코팅 플레이트



(I-A) Analog "MSH-20A", 180×180mm Plate-type



(Ⅲ-A) Digital "MSH-20D" Package-set, 180×180mm Plate-type



(I-B) Analog "MSH-30A", 260×260mm Plate

(Ⅱ-B) Digital "MSH-30D", 260×260mm Plate

- ***Made in Korea*** ***CE Certified*** ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Excellent for Sample Drying and most General Lab Heating Applications***

Ⅰ. Analog PWM Control System "MSH-A"

∗ Superior Linearity PWM Control for Temperature & Stirring Speed

Ⅱ. Digital Microprocessor Control System "MSH-D"

- ***Patented Jog-Shuttle Control System***

∗ Speed & Control Resolution : 80 ~ 1,500 rpm, 5 rpm
∗ Temp. Accuracy / Resolution : ±0.3℃ at Set Temp. / 0.1℃-Display, 0.5℃-Control
∗ Timer & Alarm : 99hr 59min(with Continuous run), Error status & Timer-end
∗ Safety Circuit : Over Temp. Protection
∗ User's Self-Compensation : Control Difference between Real Temp. & Indicated Temp. (±20.0℃)
∗ Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor
∗ Storage Function for the set Values : Temp. and Timer
∗ Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Ⅲ. Digital Package-set ; Complete with

∗ **Ⅲ-A. "MSH-20D" Set :** ① Hotplate Stirrer **"MSH-20D"**, ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD200"** Stainless-steel Support Rod Φ12×L450mm, ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

∗ **Ⅲ-B. "MSH-30D" Set :** ① Hotplate Stirrer **"MSH-30D"**, ② **"SS500"** PT100 External / Direct Contact Temp. Probe, ③ **"RD100"** Stainless-steel Support Rod Φ12.7×L390mm, ④ **"CL220"** Holder+Clamp+Clip for External Temp. Probe

Specifications & Ordering information

Spec. \ Model		A. 180×180mm Plate (I-A) Analog "MSH-20A" (Ⅱ-A) Digital "MSH-20D"	B. 260×260mm Plate (I-B) Analog "MSH-30A" (Ⅱ-B) Digital "MSH-30D"
Plate Size(mm)		180×180mm Plate-type	260×260mm Plate-type
Material	Body	Powder Coated Aluminum	Powder Coated steel
	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance, Easy to Clean)	
Stirring Capa. & Motor Rating		Max. 20Lit, 9 / 4W	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		600W	1.2kW
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Permissible Temp. & RH %		Ambient +5 ~ 50℃, 85% RH	
Dimension & Weight		206×307×h99mm, 3.3kg	286×387×h99mm, 3.5kg
Packing Size & Gross Weight		400×280×h200mm, 5kg	430×320×h200mm, 5kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Ⅰ. Analog Unit Only		**(I-A) "MSH-20A"**	**(I-B) "MSH-30A"**
Cat. No.	230V	DH.WMH03120	DH.WMH03121
	120V	DH.WMH02120	DH.WMH02121
Price, Each. ₩			
Ⅱ. Digital Unit Only		**(Ⅱ-A) "MSH-20D"**	**(Ⅱ-B) "MSH-30D"**
Cat. No.	230V	DH.WMH03020	DH.WMH03022
	120V	DH.WMH02020	DH.WMH02022
Price, Each. ₩			
Ⅲ. Digital Package-set		**(Ⅲ-A) "MSH-20D" Set**	**(Ⅲ-B) "MSH-30D" Set**
Cat. No.	230V	DH.WMH03021	DH.WMH03023
	120V	DH.WMH02021	DH.WMH02023
Price, Each. ₩			

∗ Other Specifications are available upon Customer's Request.

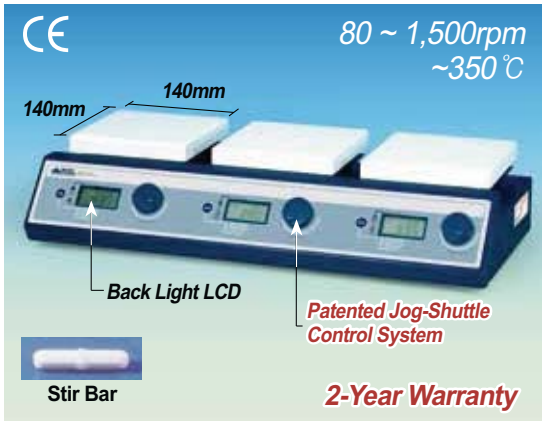
Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503060	(1) Temp. Probe, **"SS500", "PT100"**, Φ4×L250mm	
DH.WHP503061	(2) **Teflon Coated** Temp. Probe, **"SS510"**, Φ4×L250mm	
DH.WHP503011	Stand Rod, **"RD100"**, Φ12.7×L390 for **"MSH-30A / 30D"**	
DH.WHP503036	, **"RD200"**, Φ12×L450 for **"MSH-20A / 20D"**	
DH.WHP503012	Holder / Clamp / Clip, **"CL220"**, for Temp. Probe	

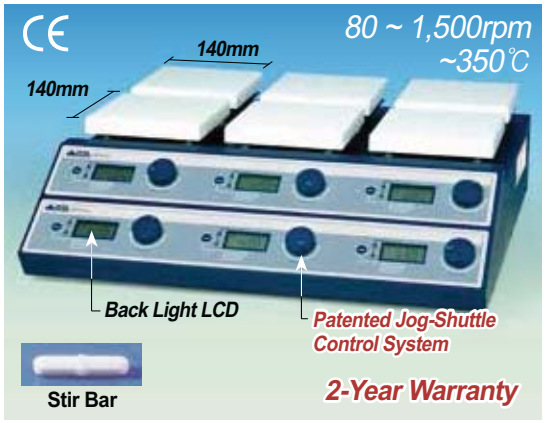
DAIHAN® 350℃ Systematic Multi-Hotplate Stirrer "SMHS", 3- or 6-Places, Ceramic-Coated Plate

With Digital Feedback Control, Independent Heating & Stirring Control, up to 350℃, 80~1,500 rpm

멀티 가열 자력 교반기, 우수한 온도균일성, 3- or 6- 구 개별 조절 가능



A. 3 Plate-type Multi-Hotplate Stirrer "SMHS-3"



B. 6(3×2) Plate-type Multi-Hotplate Stirrer "SMHS-6"

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Excellent for Multi-use and wide range Sample Testing***
- ***Patented Jog-Shuttle Control System***

* Systemized 3- and 6-Hotplate Stirrer
* Independent Heating and Stirring Control
* Digital Feedback Control by High-Performance Microprocessor
* Ceramic Coated Plate-Chemical/Acid Resistance
* Maximum Temperature of 350℃ with ±0.3℃ Control Accuracy
* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
* Digital LCD with Back-Light Function
* Digital Timer Function Included : 99 hr 59 min
* Storage Function for the Set Values : Temperature, RPM and Timer
* Locking Mode for Experimental Safety Supported

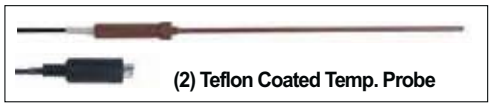
Specifications & Ordering information

Spec. \ Model		A. "SMHS-3" 3 Plates	B. "SMHS-6" 6 Plates
Plate-type		3 Plate-type	6(3×2) Plate-type
Plate Size		140×140mm	
Stirring Capa. & Motor Rating		Max. 20 Lit(H_2O), 9/4W×3	Max. 20 Lit(H_2O), 9/4W×6
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Temp. Range & Accuracy		Max. 350 ℃, ±0.3℃ at Set Temp.	
Temp. Resolution		0.1 ℃-Display, 0.5 ℃-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		400 W ×3 Plates	400 W ×6 Plates
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Ports for Stand Rod		2ea	4ea
Permissible Temp. & RH %		Room Temp. +5 ~ 50℃, 85% RH	
Material	Body	Powder Coated steel	
	Plate	Ceramic Coated Aluminum	
Dimension & Weight		510×240×h100mm, 10kg	510×410×h180mm, 18kg
Packing Size & Gross Weight		540×330×h170mm, 10kg	570×540×h230mm, 18kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WMH03503	DH.WMH03506
	120V	DH.WMH02503	DH.WMH02506
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ 운임 약 ₩ 9,000 별도!

(1) Stainless-steel Temp. Probe



(2) Teflon Coated Temp. Probe

(3) Stand Rod "RD200", Stainless-steel

(4) Holder / Clamp / Clip for Temp. Probe

Optional External Temp Probe/Stand Rod/Holder/Clamp/Clip

		Ea. Price, ₩
DH.WHP503060	(1) External / Direct Contact Temp. Probe, **"SS500",** Stainless-steel, Φ4×L250mm, Cable L190mm	
DH.WHP503061	(2) External / Direct Contact Temp. Probe, **"SS510", Teflon Coated,** Φ4×L250mm, Cable L190mm,	
DH.WHP503036	(3) Stand Rod **"RD200",** Stainless-steel, 1.5p screw, Φ12×L450mm, for **"SMHS"**	
DH.WHP503012	(4) Holder/Clamp/Clip, **"CL220",** for Temp. Probe	

DAIHAN® Overhead Stirrer Selection Guide of Product Line

Key Specification of Product Line

Speed or High Torque	High Speed							High Torque								
Controller Type	Analog Model		Digital Model					Analog Model		Digital Model						
	Integrated Controller		Integrated Controller		Remote Controller		*New* PREMIUM Digital Model	Integrated Controller		Integrated Controller		Remote Controller			*New* PREMIUM Digital Model	
Model Name	HS-50A	HS-120A	HS-30D	HS-100D	HS-30T	HS-100T	OVS-S05	HT-50AX	HT-120AX	HT-50DX	HT-120DX	HT-50T	HT-120T	HT-140T	OVS-T16	OVS-G30
Max. Stirring Capacity(H_2O)	10Lit	20Lit	10Lit	20Lit	10Lit	20Lit	100Lit	40Lit	60Lit	40Lit	60Lit	40Lit	60Lit	100Lit	100Lit	100Lit
Max. Viscosity(mPas) (Viscosity Standard Oil 1.5Lit)	5,000	10,000	5,000	10,000	5,000	10,000	50,000	60,000	90,000	60,000	90,000	60,000	90,000	120,000	200,000	350,000
Motor Rating (Input / Output)	83W /75W	130W /120W	83W /75W	130W /120W	83W /75W	130W /120W	200W /180W	83W /75W	130W /120W	83W /75W	130W /120W	83W /75W	130W /120W	130W /120W	200W /180W	200W /180W
Max. Torque (N·cm)	70	80	70	80	70	80	200	180	210	180	210	180	210	300	700	800
Speed Range (RPM)	200 ~ 3,000							50 ~ 1,000							50 ~ 2,000	10 ~ 550
Max. Push Through Shafts Φ(mm)	8						10									
Max. Chcuk Grip Capa. Φ(mm)	10							12							10	
Controller	Analog Phase Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push), Remote type		Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)	Analog Phase Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push), Remote type			Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Display	None		Back Light LCD					None		Back Light LCD						
Permissible Temp. & Humidity	0 ~ 40°C / 80%															
Power Supply	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz															

Selection Guide for Standard Viscosity

(Unit : mPas)

Material	Viscosity	Recommended Models							
Water	1	HS-50A HS-30D HS-30T	HS-120A HS-100D HS-100T	OVS-S05	HT-50AX HT-50DX HT-50T	HT-120AX HT-120DX HT-120T	HT-140T	OVS-T16	OVS-G30
Milk	3								
Soybean oil	160								
Varnish	500								
Lacquer	1,000								
Honey	3,000								
Viscosity Standard Oil	5,000								
	10,000	-	-	-	-	-	-	-	
	15,000								
Ketchup	30,000								
Viscosity Standard Oil	50,000								
	60,000								
Mustard	70,000								
Viscosity Standard Oil	90,000								
Corn Syrup	100,000								
Viscosity Standard Oil	120,000								
	150,000								
	200,000								
Peanut Butter	250,000								
Viscosity Standard Oil	350,000								

DAIHAN® PREMIUM Hi-Speed Overhead Stirrer "OVS-S05", with Hi-Capacity BLDC-motor, 2:1, Max. 3,000rpm NEW

With Torque(Ncm)- / Viscosity(mPas)- / Temperature(℃)-Real Time Display, Optional Remote Control, 50,000mPas, Max. 100Lit

프리미엄 고속 교반기, 저/중점도용, 고사양 BLDC-motor, 토크- / 점도- / 온도-표시기능, "Push-Through" Shaft(Φ10mm or Less)

A. Max. 100Lit (H_2O) PREMIUM "OVS-S05" Unit Only

B. Max. 100Lit (H_2O) PREMIUM "OVS-S05" Package-set

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***Patented Jog Dial & Touch Button***
- ***Hi-Capacity Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost***
- ***Torque Value(Ncm)-/Viscosity(mPas)-/Temperature(℃) Real-time Display Can be used with K-type Temp. Probe for Temperature Display.***
- ***Can be used with Optional Digital Remote Controller.***
- ***"Push-Through" Shafts(Φ10mm or Less) ; Ideal for Raising or Lowering the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

∗ Ideal for Low-/Middle-Viscosity ∗ Smooth Start and Change of the Stirring Speed.
∗ Large Size Digital LCD Display

Specifications & Ordering information

Spec. \ Model	"OVS-S05" Max. Speed 3,000rpm
Stirring Capacity	Max. 100 Lit (H_2O)
Maximum Viscosity / Torque	50,000 mPas / 200 Ncm
Speed Range & Motor	200 ~ 3,000RPM, Hi-Capacity Brushless DC-motor, 2:1
Motor Rating (Input / Output)	200 / 180W
Controller / Safety Device	Digital PID Control / Over Heat & Current Protector for Motor
Chuck Grip Capa. Φmm	dia Φ3~10mm Shafts, Flex-Coupling(Φ6~12mm)
"Push-Through" Shafts	dia Φ10mm or Less
Permissible Temp. & Humidity	0 ~ 40℃, 80%
Dimension & Weight & Material	84×205×h275mm, 3.5kg, Aluminum Die Casting
Power Consumption	250W
Electrical Reqts.	1 Phase, AC 120V, 60 Hz or AC 230 V, 50 / 60 Hz

∗ Other Specifications are available upon Customer's Request

A. Unit-only

		Ea. Price, ₩
DH.StiO0005	Hi-Speed Overhead Stirrer Unit **"OVS-S05"**, 230V	
DH.StiO0005.1	, 120V	

B. Package-set

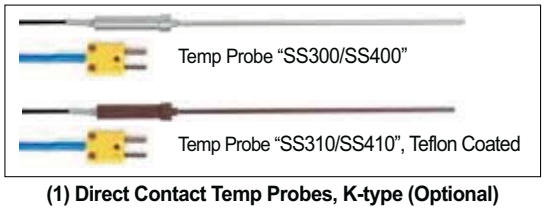
∗ Complete with ① **"OVS-S05"** StirrerUnit
② **"S723"** Stainless-steel Impeller (Rod Φ8×L650mm, 3-Blade Φ80mm)
③ **"CL200"** Clamp
④ **"KA1177"** Safety Stand (Rod Φ23×L800mm, Base 34×29cm)

		Ea. Price, ₩
DH.StiO0105	Overhead Stirrer **"OVS-S05"** Package-set, 230V	
DH.StiO0105.1	, 120V	

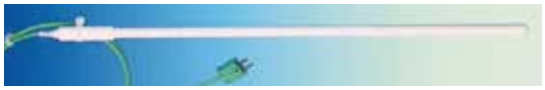
C. Optional Digital Remote Controller, with Connecting Cable 1.5m

∗ **Assembly-type, Torque / Viscosity / Temp**-Control & Display
∗ Connecting Cable 1.5m(Included) and 2m(Option)
∗ Size : w75×d150×h30mm, Weight : 150g

		Ea. Price, ₩
DH.WOS50010	Digital Remote Controller with 1.5m Connecting Cable & Plug	
DH.Cabl002	Optional Connecting Cable & Plug, 2m	



(1) Direct Contact Temp Probes, K-type (Optional)



(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe (Optional)

Optional Temperature Probe

(1) Direct Contact Temp Probe, K-type

		Ea. Price, ₩
DH.WHP503040	Temp Probe, K-type, **"SS300"**, L250×Φ 4.8 mm	
DH.WHP503050	, **"SS400"**, L380×Φ 4.8 mm	
DH.WHP503041	Temp Probe, K-type, **"SS310"**, Teflon Coated, L250×Φ5 mm	
DH.WHP503051	, **"SS410"**, Teflon Coated, L380×Φ5 mm	

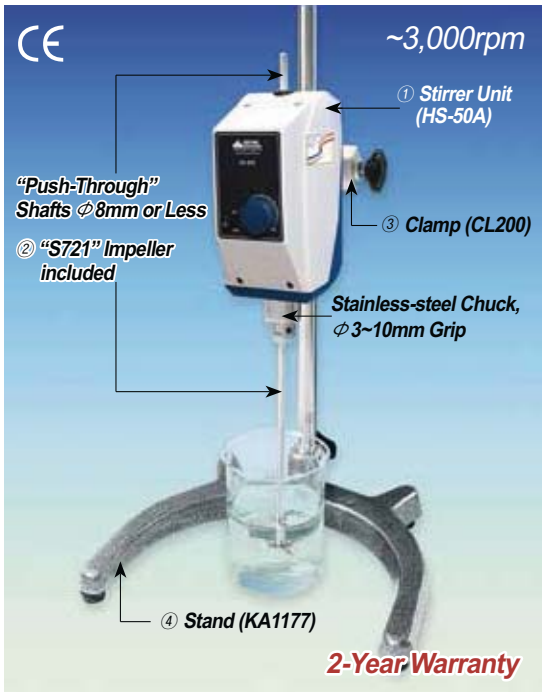
(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe

※ **Note! For the Optional Probe ⇒ See the "Measuring, Thermometer" Section**
For the Optional Impeller ⇒ See the "Stirrer, Accessory" Section

DAIHAN® High-Speed Analog Overhead Stirrer "HS-A", for Low-/Middle-Viscosity, Max.10 · 20Lit, Max. 3,000rpm

With "Push-Through" Shaft(Φ8mm or Less) and Chuck grip Φ3~10mm, Flex-Coupling Φ6~12mm, up to 5,000 · 10,000mPas

아날로그 고속 교반기, 저/중점도용, 사용교반봉 ; ①기본은Φ3~10mm, ②관통은Φ3~8mm, & ③별도의 Flex-Coupling 활용시Φ6~12mm



Max. 10 Lit (H_2O) High-Speed Analog Overhead Stirrer "HS-50A" Package-set

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***

■ ***Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance***

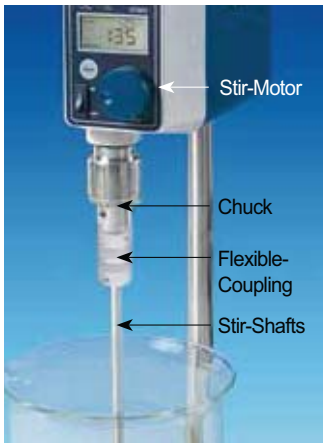
* with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
* "Push-Through" Shafts(Φ8mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"
* Easy-to-use Dial for Speed Setting
* Smooth Start and Change of the Stirring Speed

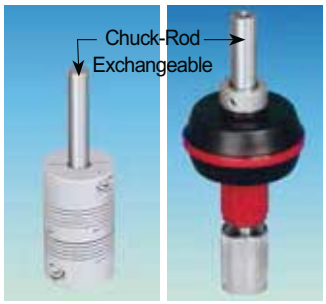
Specifications & Ordering information

Spec. \ Models		"HS-50A" Max. Stirring Capa. 10 Lit	"HS-120A" Max. Stirring Capa. 20 Lit
Stirring Capacity		Max. 10 Lit (H_2O)	Max. 20 Lit (H_2O)
Maximum Viscosity / Torque		5,000 mPas / 85 Ncm	10,000 mPas / 145 Ncm
Speed Range & Motor		200 ~ 3,000 rpm, Direct Driven DC Motor	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Controller / Safety Device		Analog Phase Controller / Over Heat Protector for motor	
Chuck Grip Capa. Φmm		dia Φ3~10mm Shafts	
"Push-Through" Shafts		dia Φ8mm or Less	
Permissible Temp. & Humidity		0 ~ 40℃, 80%	
Material		ABS and Aluminum	
Dimension & Weight		90×145×h180mm, 4.5 kg	90×145×h180mm, 5.3 kg
Packing Size & Gross Weight		320×300×h180mm, 5 kg	320×300×h180mm, 8 kg
Power Consumption		85 W	130 W
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Unit-only			
Cat. No.	230V	DH.WOS01210	DH.WOS01215
	120V	DH.WOS02210	DH.WOS02215
Price, Each. ₩			
Package-set (with ① Stirrer Unit, ② Impeller, ③ Clamp, ④ Stand)			
Cat. No.	230V	DH.WOS01211	DH.WOS01216
	120V	DH.WOS02211	DH.WOS02216
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

The Figure ; Use of Coupling





(1) Hi-flex Metal for Φ6~12 Shafts | (2) Rubber Based for Φ7~10 Shafts

* **"HS-50A" Package-set :** Complete with ① **"HS-50A"** Stirrer Unit, ② **"S721"** Stainless-steel Impeller (Rod Φ8×L500mm, 3-Blade Φ50mm), ③ **"CL200"** Clamp, and ④ **"KA1177"** Safety Stand (Rod Φ23×L800mm, Base w34×d29cm)
* **"HS-120A" Package-set :** Complete with ① **"HS-120A"** Stirrer Unit, ② **"S723"** Stainless-steel Impeller (Rod Φ8×L650mm, 3-Blade Φ80mm), ③ **"CL200"** Clamp, and ④ **"KA1177"** Safety Stand (Rod Φ23×L800mm, Base w34×d29cm)

Flexible Coupling, for Safety Stirring of Φ6~12mm Shafts of Overhead Stirrers for Stirrers between Stirring Motor and Shaft, 안전교반용 유연성 커플링

■ ***Used to Compensate Any Vibrations Between The Motor and Stirring Shafts***

(1) UTILITY High-Flex. Metal Coupling, with 2×Flex-band, for Φ6~12mm Stir-Shafts Ideal for Low/High Viscosity and High/Low Speed

* Made in Korea
* Shaft Fastening by Screw Clamp Band
* Made of DURALUMIN
* with Exchangeable STS Chucking Rod Φ8 & 10mm, L40mm

		Ea.	Price, ₩
SL.StiC011	Stir-Coupling, Hi-flex, Φ8mm Chuck-rod , for-Φ6mm Stir-Shaft , 56g, Φ25×h44mm		
SL.StiC012	-Φ8mm Stir-Shaft , 53g, Φ25×h44mm		
SL.StiC013	-Φ10mm Stir-Shaft, 49g, Φ25×h44mm		
SL.StiC014	Stir-Coupling, Hi-flex, Φ10mm Chuck-rod, for-Φ8mm Stir-Shaft , 49g, Φ25×h44mm		
SL.StiC015	-Φ10mm Stir-Shaft, 43g, Φ25×h44mm		
SL.StiC016	-Φ12mm Stir-Shaft, 33g, Φ25×h44mm		

(2) Very Flexible Rubber Based Coupling, for Φ7~10mm Shafts Especially, Ideal for GLASS Shafts and Low/Middle Viscosity & High Speed

* Made in Germany
* Shaft Fastening by Screw Compression Rubber Ring Pad.
* with Φ10×L40mm Exchangeable Stainless-steel Chucking Rod

		Ea.	Price, ₩
WI.1445000	Stir-Coupling, Rubber Based, for Φ7~Φ10mm Shafts, 72.5g, Body Φ46×h80mm		

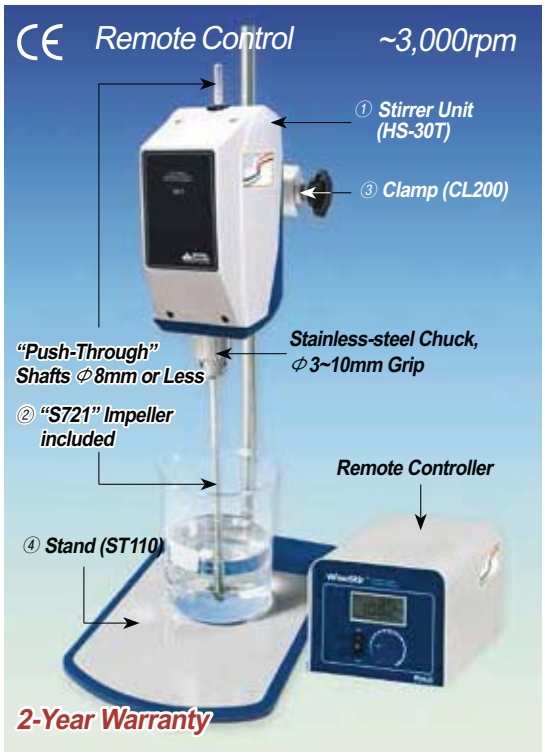
※ Note! Details of Wide-Range Coupling : See the "Stirrer Accessory"

DAIHAN® High-Speed Digital Overhead Stirrers "HS-D" & "HS-T", for Low-/Middle-Viscosity, Max.10 · 20Lit

With "Push-Through" Shaft and Chuck grip Φ3~10mm, Flex-Coupling Φ6~12mm, Max. 3,000rpm, up to 5,000 · 10,000mPas

디지털 고속 교반기, 저/중점도용, 사용교반봉 ; ①기본은Φ3~10mm, ②관통은Φ3~8mm, & ③별도의 Flex-Coupling 활용시Φ6~12mm

(I-A) Max. 10 Lit (H_2O) High-Speed Digital Overhead Stirrer "HS-30D" Package-set



(II-A) Max. 10 Lit (H_2O) High-Speed Digital Overhead Stirrer, with Remote Controller "HS-30T" Package-set

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***

■ ***Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance***

■ ***Patented Jog-Shuttle Control System***

* with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
* "Push-Through" Shafts(Φ8mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts Moving the Motor Head - "Adjustable Height of Shaft"
* Smooth Start and Change of the Stirring Speed

I. Digital Standard-type "HS-D"

Spec. \ Models		(A) "HS-30D" Max. Stirring Capa. 10 Lit	(B) "HS-100D" Max. Stirring Capa. 20 Lit
Maximum Viscosity / Torque		5,000 mPas / 70 Ncm	10,000 mPas / 80 Ncm
Speed Range & Resolution		200 ~ 3,000 rpm, 1 rpm-Display / 1 rpm-Control	
Motor / Safety		Device Direct Driven DC Motor / Overload & Heat Protector for Motor	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Controller / Display		Digital Feedback Controller / Digital LCD with Back-Light Function	
Chuck Grip Capa. Φmm		dia Φ3~10mm Shafts	
"Push-Through" Shafts		dia Φ8mm or Less	
Permissible Temp. & Humidity		0 ~ 40℃, 80%	
Material		ABS and Aluminum	
Dimension & Weight		90×145×h180mm, 4.5 kg	90×145×h180mm, 5.3 kg
Packing Size & Gross Weight		320×300×h180mm, 5 kg	320×300×h180mm, 8 kg
Power Consumption		85 W	130 W
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Unit-only			
Cat. No.	230V	DH.WOS01015	DH.WOS01025
	120V	DH.WOS02015	DH.WOS02025
Price, Each. ₩			
Digital Package-set (with ① Stirrer Unit, ② Impeller, ③ Clamp, ④ Stand)			
Cat. No.	230V	DH.WOS01016	DH.WOS01026
	120V	DH.WOS02016	DH.WOS02026
Price, Each. ₩			

II. Digital Remote Controlled-type "HS-T"

Spec. \ Model		(A) "HS-30T" Max. Stirring Capa. 10 Lit	(B) "HS-100T" Max. Stirring Capa. 20 Lit
Maximum Viscosity / Torque		5,000 mPas / 70 Ncm	10,000 mPas / 80 Ncm
Speed Range & Motor		200 ~ 3,000 rpm, Direct Driven DC Motor	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Timer & Alarm		99hr 59min (with Continuous run.), Timer-end Alarm	
Controller / Display		Digital Feedback Controller / Digital LCD with Back-Light Function	
Chuck Grip Capa. Φmm		dia Φ3~10mm Shafts	
"Push-Through" Shafts		dia Φ8mm or Less	
Permissible Temp. & Humidity		0 ~ 40℃, 80%	
Safety Device / Material		Overload & Heat Protector for motor / ABS and Aluminum	
Dimension & Weight*		90×100×h180mm, 3 kg	90×100×h180mm, 3.8 kg
Packing Size & Gross Weight		580×340×h230mm, 5 kg	580×340×h230mm, 8 kg
Power Consumption		75 W	120 W
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Unit & Remote Controller			
Cat. No.	230V	DH.WOS01035	DH.WOS01045
	120V	DH.WOS02035	DH.WOS02045
Price, Each. ₩			
Remote Package-set (with ① Stirrer Unit + Remote Controller, ② Impeller, ③ Clamp, ④ Stand)			
Cat. No.	230V	DH.WOS01036	DH.WOS01046
	120V	DH.WOS02036	DH.WOS02046
Price, Each. ₩			

* Weight of Remote Controller = 2.5kg ** Other Specifications are available upon Customer's Request.

* **"HS-30D(30T)" Package-set :** Complete with ① **"HS-30D(30T)"** Stirrer Unit (with Remote Controller), ② **"S721"** Stainless-steel Impeller(Rod Φ8×L500mm, 3-Blade Φ50mm), ③ **"CL200"** Clamp, and ④ **"ST110"** Standard Plate Stand(Rod Φ16×L800mm, Base w20×d35cm)
* **"HS-100D(100T)" Package-set :** Complete with ① **"HS-100D(100T)"** Stirrer Unit (with Remote Controller), ② **"S723"** Stainless-steel Impeller(Rod Φ8×L650mm, 3-Blade Φ80mm), ③ **"CL200"** Clamp, and ④ **"ST120"** Wide Plate Stand(Rod Φ23×L1,000mm, Base w30×d40cm)

Articles	Cat. No	Description

DAIHAN® PREMIUM Hi-Torque Overhead Stirrer "OVS-T16", with Hi-Capacity BLDC-motor, Max. 14:1, 200,000mPas

With Torque(Ncm)- / Viscosity(mPas)- / Temperature(℃)-Real Time Display, Optional Remote Control, Max. 2,000rpm NEW

프리미엄 중/고점도용 교반기, 고사양 BLDC-motor, 토크- / 점도- / 온도-표시기능, "Push-Through" Shaft(Φ10mm or Less)

A. Max. 100Lit (H_2O) PREMIUM "OVS-T16" Unit Only

B. Max. 100Lit (H_2O) PREMIUM "OVS-T16" Package-set

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***Patented Jog Dial & Touch Button***
- ***Hi-Capacity Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost***
- ***Torque Value(Ncm)-/Viscosity(mPas)-/Temperature(℃) Real-time Display Can be used with K-type Temp. Probe for Temperature Display.***
- ***Can be used with Optional Digital Remote Controller.***
- ***"Push-Through" Shafts(Φ10mm or Less) ; Ideal for Raising or Lowering the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

∗ Ideal for Low-/Middle-Viscosity ∗ Smooth Start and Change of the Stirring Speed.
∗ Large Size Digital LCD Display

Specifications & Ordering information

Spec. \ Model	"OVS-T16" Max. Torque 200,000mPas
Stirring Capacity	Max. 100 Lit (H_2O)
Maximum Viscosity / Torque	200,000 mPas / 700 Ncm
Speed Range & Motor	50~2,000RPM, Hi-Capacity Brushless DC-motor, Gear(2.6:1 / 14:1)
Motor Rating (Input / Output)	200 / 180W
Controller / Safety Device	Digital PID Control / Over Heat & Current Protector for Motor
Chuck Grip Capa. Φmm	dia Φ6~10mm Shafts, Flex-Coupling(Φ6~16mm)
"Push-Through" Shafts	dia Φ10mm or Less
Permissible Temp. & Humidity	0 ~ 40℃, 80%
Dimension & Weight & Material	84×205×h275mm, 3.5kg, Aluminum Die Casting
Power Consumption	250W
Electrical Reqts.	1 Phase, AC 120V, 60 Hz or AC 230 V, 50 / 60 Hz

∗ Other Specifications are available upon Customer's Request

A. Unit-only

		Ea. Price, ₩
DH.StiO0016	Hi-Torque Overhead Stirrer Unit **"OVS-T16"**, 230V	
DH.StiO0016.1	, 120V	

B. Package-set

∗ Complete with ① **"OVS-T16"** Stirrer Unit
② **"S732"** Stainless-steel Impeller (Rod Φ8×L500mm, 4-Blade Φ70mm)
③ **"CL200"** Clamp
④ **"KA1177"** Safety Stand (Rod Φ23×L800mm, Base 34×29cm)

		Ea. Price, ₩
DH.StiO0116	Overhead Stirrer **"OVS-T16"** Package-set, 230V	
DH.StiO0116.1	, 120V	

C. Optional Digital Remote Controller, with Connecting Cable 1.5m

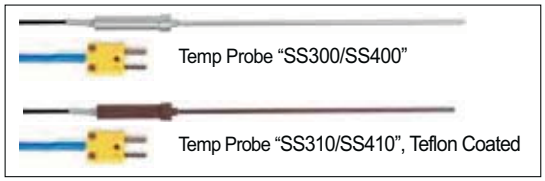
∗ **Assembly-type, Torque / Viscosity / Temp**-Control & Display
∗ Connecting Cable 1.5m(Included) and 2m(Option)
∗ Size : w75×d150×h30mm, Weight : 150g

		Ea. Price, ₩
DH.WOS50010	Digital Remote Controller with 1.5m Connecting Cable & Plug	
DH.CabI002	Optional Connecting Cable & Plug, 2m	

Optional Temperature Probes

(1) Direct Contact Temp Probe, K-type

		Ea. Price, ₩
DH.WHP503040	Temp Probe, K-type, **"SS300"**, L250×Φ 4.8 mm	
DH.WHP503050	, **"SS400"**, L380×Φ 4.8 mm	
DH.WHP503041	Temp Probe, K-type, **"SS310"**, Teflon Coated, L250×Φ5 mm	
DH.WHP503051	, **"SS410"**, Teflon Coated, L380×Φ5 mm	



(1) Direct Contact Temp Probe, K-type (Optional)

(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe (Optional)

(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe

※ **Note! For the Optional Probe** ⇒ **See the "Measuring, Thermometer" Section**
For the Optional Impeller ⇒ **See the "Stirrer, Accessory" Section**

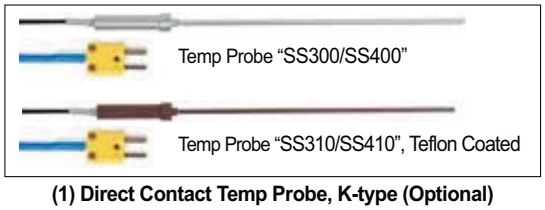
DAIHAN® PREMIUM Ultra Hi-Torque Overhead Stirrer "OVS-G30", with Hi-Capacity BLDC-motor, Max. 60:1 NEW

With Planetary-gear, Torque(Ncm)- / Viscosity(mPas)- / Temperature(℃)-Real Time Display, Optional Remote Control

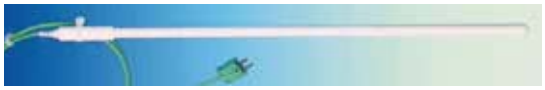
프리미엄 초고점도용 교반기, 고사양 BLDC-motor, 토크- / 점도- / 온도-표시기능, Max. 550rpm, 350,000mPas

A. Max. 100Lit (H₂O) PREMIUM Ultra "OVS-G30" Unit Only

B. Max. 100Lit (H₂O) PREMIUM Ultra "OVS-G30" Package-set



(1) Direct Contact Temp Probe, K-type (Optional)



(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe (Optional)

- ***Made in Korea*** ■ ***PL (Product Liability) Insurance***
- ***Patented Jog Dial & Touch Button***
- ***High Performance Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost***
- ***Torque Value(Ncm)-/Viscosity(mPas)-/Temperature(℃) Real-time Display Can be used with K-type Temp. Probe for Temperature Display.***
- ***Excellent Planetary Gear Design for High Torque(60:1 Ratio)***
- ***Can be used with Optional Wire Digital Remote Controller.***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***

∗ Ideal for Low-/Middle-Viscosity ∗ Smooth Start and Change of the Stirring Speed.
∗ Large Size Digital LCD Display

Specifications & Ordering information

Spec. \ Model	"OVS-G30" Max. Torque 350,000mPas
Stirring Capacity	Max. 100 Lit (H_2O)
Maximum Viscosity / Torque	350,000 mPas / 800 Ncm
Speed Range & Motor	10~550RPM, Hi-Capacity Brushless DC-motor, Gear(11:1 / 60:1)
Motor Rating (Input / Output)	200 / 180W
Controller / Safety Device	Digital PID Control / Over Heat & Current Protector for Motor
Chuck Grip Capa. Φmm	dia Φ6~10mm Shafts, Flex-Coupling(Φ6~16mm)
Permissible Temp. & Humidity	0 ~ 40℃, 80%
Dimension & Weight & Material	84×205×h355mm, 3.5kg, Aluminum Die Casting
Power Consumption	250W
Electrical Reqts.	1 Phase, AC 120V, 60 Hz or AC 230 V, 50 / 60 Hz

∗ **Other Specifications are available upon Customer's Request**

A. Unit-only

		Ea. Price, ₩
DH.StiO0030	Ultra Hi-Torque Overhead Stirrer Unit **"OVS-G30"**, 230V	
DH.StiO0030.1	, 120V	

B. Package-set

∗ Complete with ① **"OVS-G30"** Stirrer Unit
② **"S732"** Stainless-steel Impeller (Rod Φ8×L500mm, 4-Blade Φ70mm)
③ **"CL200"** Clamp
④ **"KA1177"** Safety Stand (Rod Φ23×L800mm, Base 34×29cm)

		Ea. Price, ₩
DH.StiO0130	Overhead Stirrer **"OVS-G30"** Package-set, 230V	
DH.StiO0130.1	, 120V	

C. Optional Digital Remote Controller, with Connecting Cable 1.5m

∗ **Assembly-type, Torque / Viscosity / Temp**-Control & Display
∗ Connecting Cable 1.5m(Included) and 2m(Option)
∗ Size : w75×d150×h30mm, Weight : 150g

		Ea. Price, ₩
DH.WOS50010	Digital Remote Controller with 1.5m Connecting Cable & Plug	
DH.Cabl002	Optional Connecting Cable & Plug, 2m	

Optional Temperature Probes

(1) Direct Contact Temp Probe, K-type

		Ea. Price, ₩
DH.WHP503040	Temp Probe, K-type, **"SS300"**, L250×Φ 4.8 mm	
DH.WHP503050	, **"SS400"**, L380×Φ 4.8 mm	
DH.WHP503041	Temp Probe, K-type, **"SS310"**, Teflon Coated, L250×Φ5 mm	
DH.WHP503051	, **"SS410"**, Teflon Coated, L380×Φ5 mm	

(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe

※ **Note! For the Optional Probe ⇒ See the "Measuring, Thermometer" Section**
For the Optional Impeller ⇒ See the "Stirrer, Accessory" Section

Articles	Cat. No	Description

DAIHAN® High-Torque Overhead Stirrer "HT-AX" & "HT-DX", for Middle-/High-Viscosity, Max.40 · 60Lit, 60,000 · 90,000mPas

With "Push-Through" Shaft(Φ10mm or Less) and Chuck grip Φ6~12mm, Flex-Coupling Φ6~16mm, Max.1,000rpm

중/고점도용 강력교반기, 사용교반봉 ; ①기본은Φ6~12mm, ②관통은Φ6~10mm, & ③별도의 Flex-Coupling 활용시Φ6~16mm

(Ⅲ-B) Max. 60Lit Analog "HT-120AX" Package-set

(Ⅳ-B) Max. 60Lit Digital "HT-120DX" Package-set

■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***

■ ***Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance***

* with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
* 3.5:1 Ratio Worm-geared Motor
* "Push-Through" Shafts(Φ10mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"

Ⅰ. Analog Control Stirrer "HT-AX"

* Easy-to-use Dial for Speed Setting
* Speed Range : 50 ~ 1,000 rpm
* Smooth Start and Change of the Stirring Speed

Ⅱ. Digital Control Stirrer "HT-DX"

■ ***Patented Jog-Shuttle Control System***

* Digital LCD with Back-Light Function
* Speed Range : 50 ~ 1,000 rpm, Control and Display by 1 rpm
* Timer : 99hr 59min (with Continuous run), Error status & Timer-end Alarm

Ⅲ. Analog Stirrer Package-set

* **Ⅲ-A. "HT-50AX" Set :** Complete with ① **"HT-50AX"** Stirrer Unit, ② **"S732"** Stainless-steel Impeller(Rod Φ8×L500mm, 4-Blade Φ70mm), ③ **"CL200"** Clamp, and ④ **"KA1177"** Safety Stand(Rod Φ23×L800mm, Base w34×d29cm)
* **Ⅲ-B. "HT-120AX" Set :** Complete with ① **"HT-120AX"** Stirrer Unit, ② **"S736"** Stainless-steel Impeller(Rod Φ10×L650mm, 4-Blade Φ90mm), ③ **"CL200"** Clamp, and ④ **"KA1177"** Safety Stand(Rod Φ23×L800mm, Base w34×d29cm)

Ⅳ. Digital Stirrer Package-set

* **Ⅳ-A. "HT-50DX" Set :** Complete with ① **"HT-50DX"** Stirrer Unit, ② **"S732"** Stainless-steel Impeller (Rod Φ8×L500mm, 4-Blade Φ70mm), ③ **"CL200"** Clamp, and ④ **"ST120"** Wide Plate Stand (Rod Φ23×L1000mm, Base w30×d40cm)
* **Ⅳ-B. "HT-120DX" Set :** Complete with ① **"HT-120DX"** Stirrer Unit, ② **"S736"** Stainless-steel Impeller (Rod Φ10×L650mm, 4-Blade Φ90mm), ③ **"CL200"** Clamp, and ④ **"ST200"** Deluxe Safety Stand (Rod Φ23×L1200mm, Base w39×up to 75cm)

Specifications & Ordering information

Spec. \ Model	A. Max. Stirring Capa. 40Lit (Ⅰ-A) Analog "HT-50AX" (Ⅱ-A) Digital "HT-50DX"	B. Max. Stirring Capa. 60 Lit (Ⅰ-B) Analog "HT-120AX" (Ⅱ-B) Digital "HT-120DX"
Stirring Capacity	Max. 40 Lit (H_2O)	Max. 60 Lit (H_2O)
Maximum Viscosity / Torque	60,000 mPas / 180 Ncm	90,000 mPas / 210 Ncm
Motor	Worm-Geared DC Motor (3.5:1 Ratio)	
Motor Rating (Input / Output)	83 / 75 W	130 / 120 W
Chuck Grip Capa. Φmm	dia Φ6~12mm Shafts	
"Push-Through" Shafts	dia Φ10mm or Less	
Permissible Temp. & Humidity	0 ~ 40℃, 80%	
Safety Device / Material	Overload & Heat Protector for Motor / ABS and Aluminum	
Dimension & Weight	90×180×h130mm, 3.5 kg	90×210×h130mm, 4 kg
Packing Size & Gross Weight	320×300×h180mm, 5 kg	320×300×h180mm, 8 kg
Power Consumption	85 W	130 W
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	

Ⅰ. Analog Stirrer Only		(Ⅰ-A) "HT-50AX"	(Ⅰ-B) "HT-120AX"
Cat. No.	230V	DH.WOS01251	DH.WOS01271
	120V	DH.WOS02251	DH.WOS02271
Price, Each. ₩			
Ⅱ. Digital Stirrer Only		(Ⅱ-A) "HT-50DX"	(Ⅱ-B) "HT-120DX"
Cat. No.	230V	DH.WOS01051	DH.WOS01071
	120V	DH.WOS02051	DH.WOS02071
Price, Each. ₩			
Ⅲ. Analog Package Set		(Ⅲ-A) "HT-50AX" Set	(Ⅲ-B) "HT-120AX" Set
Cat. No.	230V	DH.WOS01252	DH.WOS01272
	120V	DH.WOS02252	DH.WOS02272
Price, Each. ₩			
Ⅳ. Digital Package Set		(Ⅳ-A) "HT-50DX" Set	(Ⅳ-B) "HT-120DX" Set
Cat. No.	230V	DH.WOS01052	DH.WOS01072
	120V	DH.WOS02052	DH.WOS02072
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

Articles	Cat. No	Description

DAIHAN® Remote Control High-Torque Digital Overhead Stirrer "HT-T", for Middle-/High-Viscosity, Max.40 · 60 · 100Lit

With "Push-Through" Shaft(Φ10mm or Less) and Chuck grip Φ6~12mm, Flex-Coupling Φ6~16mm, 120,000mPas, Max.1,000rpm

원격조절식 디지털 중/고점도용 강력교반기, 사용교반봉 ; ①기본은Φ6~12mm, ②관통은Φ6~10mm, & ③별도의 Flex-Coupling 활용시Φ8~16mm

Digital High-Torque Overhead Stirrer with Stirring Speed Remote Controller "HT-120T" Package-Set

"HT-140T" Digital High-Torque Overhead Stirrer (included Stirring Speed Remote Controller and Temp. Display) in Modular Reactor System

- ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ***Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Patented Jog-Shuttle Control System***

∗ "Push-Through" Shafts(Φ10mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"

∗ Included Remote-type Digital Feedback Controller :
- **"HT-50T", "HT-120T" model :** Included Stirring-speed Remote Controller
- **"HT-140T" model :** Ideal for Reaction System. Included Stirring-speed Control and Temperature Display Remote Controller for Reactor Module.

Specifications & Ordering information

Spec. \ Model	"HT-50T" Max. Stirring Capa. 40L	"HT-120T" Max. Stirring Capa. 60L	"HT-140T" Max. Stirring Capa. 100L
Stirring Capacity(H_2O)	Max. 40 Lit	Max. 60 Lit	Max. 100 Lit
Maximum Viscosity / Torque	60,000 mPas / 180 Ncm	90,000 mPas / 210 Ncm	120,000 mPas / 300 Ncm
Speed Range & Motor	50 ~ 1,000 rpm		50 ~ 800 rpm
	Worm-Geared Motor(3.5:1 Ratio)		
Motor Rating (Input / Output)	83 / 75 W	130 / 120 W	
Timer & Alarm	99hr 59min (with Continuous run.), Timer-end Alarm		
Controller / Display	Digital Feedback Remote Controller / Digital LCD with Back-Light Function		
	Stirring Speed Remote Controller		Stirring Speed & Temp. Display Remote Controller
Max. Impeller Shaft Diameter	Φ10 mm		
Permissible Temp. & Humidity	0 ~ 40℃, 80%		
Safety Device	Overload & Heat Protector for motor		
Material	ABS and Aluminum		
Dimension & Weight*	155×180×h110mm, 3.5 kg	155×230×h110mm, 4 kg	
Packing Size & Gross Weight	580×340×h230mm, 5 kg	580×340×h230mm, 8 kg	
Power Consumption	75 W	120 W	
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Unit & Remote Controller			
Cat. No. 230V	**DH.WOS01065**	**DH.WOS01075**	**DH.WOS01085**
Cat. No. 120V	**DH.WOS02065**	**DH.WOS02075**	**DH.WOS02085**
Price, Each. ₩			
Package-set (with ① Stirrer+Remote Contoller, ② Impeller, ③ Clamp, ④ Stand)			
Cat. No. 230V	**DH.WOS01066**	**DH.WOS01076**	-
Cat. No. 120V	**DH.WOS02066**	**DH.WOS02076**	-
Price, Each. ₩			

*** Weight of Remote Controller = 2.5kg** **** Other Specifications are available upon Customer's Request.**

∗ **"HT-50T" Package-set :** Complete with ① **"HT-50T"** Stirrer Unit with Remote Controller ②**"S732"** Stainless-steel Impeller (Rod Φ8×L500mm, 4-Blade Φ70mm) ③**"CL200"** Clamp, and ④**"ST120"** Wide Plate Stand(Rod Φ23×L1000mm, Base w30×d40cm)

∗ **"HT-120T" Package-set :** Complete with ① **"HT-120T"** Stirrer Unit with Remote Controller ②**"S736"** Stainless-steel Impeller (Rod Φ10×L650mm, 4-Blade Φ90mm) ③**"CL200"** Clamp, and ④**"ST200"** Deluxe Safety Stand (Rod Φ23× L1,200mm, Base 39×up to 75cm)

※ Details of Wide-Range Coupling : See the "Stirrer Accessory"

Articles	Cat. No	Description

DAIHAN® Digital Jar Tester "JT-M6C", 6-Paddle Stirrer for Flocculation Test, 300 rpm, with Certi. & Traceability
With Programmable Digital Feedback Control, 6 Impellers, 6 Independent Light Source, up to 6×1Lit Beakers
프로그램/디지털 자 테스터, 정밀 직류 기어드 모터와 특화된 타이밍벨트, 디지털 피드백 컨트롤

Jar Tester, Φ8×L400mm Shaft "JT-M6C"

- ■ ***Made in Korea*** ■ ***CE Certified*** ■ ***PL (Product Liability) Insurance***
- ■ ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ■ ***Ideal for Flocculation Testing in Water Treatment Laboratories***
- ■ ***6 Independent Light Source for Each Stirring Point***

∗ Deciding on Coagulant Chemistries ∗ Digital Display for RPM, Power Bar-Graph and Status
∗ Digital Feedback Control using Microprocessor : Stable and Accurate Stirring Speed
∗ Geared DC Motor and Specially Designed Timing Belt used
∗ Stable and Accurate Stirring Speed by Feedback Control
∗ Digital LCD with Back-Light Function ∗ Programmable Operation : 10 Steps, 6 Programs

Specifications & Ordering information

Spec. \ Model	"JT -M6C"
6×Paddler (Stainless steel Shaft)	Φ8×L400mm
	Straight Blade w75×h25mm
Stirring Capacity	6×1 Liter Beaker
Motor & Power	Geared DC Motor with Timing Belt (10:1 ratio), 40W
Speed & Accuracy	20~300 rpm, ±5 rpm
Timer	99hr 59min 59sec (Programmable)
Display	Digital LCD with Back-Light for RPM, Power Bar-Graph and Status
Controller	Programmable Digital Feedback Controller with Jog-Shuttle Switch (Turn + Push)
Program Function	10 Steps, 6 Programs, and Storage for Set Values : RPM and Timer
Florescent Lamp	20W×6 (Independent Light Source for Each Sample)
Dimension (w×d×h) (mm)	1,000×310×535
Safety Device	Overload & Over Heat Protector for motor
Others	PL(Product Liability) Insurance and Storage Function (RPM, Timer)
Packing and Gross Weight	1,120×430×h740mm, 69 kg
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz

Cat. No. Price, Each. ₩			
	230V	DH.WJT06020	
	120V	DH.WJT06021	

※ 운임 약 ₩ 18,000 별도!

Geared DC Motor with Special Timing Belt

Stirrer, *Accessory*

SciLab® DURAN glass Stirring Rod, with Round Ends, Φ7 ~ Φ10, L200 ~ 650mm
Borosilicate Glass α 3.3, **글라스핸디 교반봉, 끝부분이 둥근모양, 긁힘방지**

■ ***Made of DURAN® Glass Rod : by SciLab Korea.*** ∗ Rounded Ends for Extra Safety ∗ Non-Scratching

(1) L200~350mm Length

		Ea. Price,₩
SL.StiS201	Glass Rod, Φ7, L200mm	
SL.StiS202	, L250mm	
SL.StiS203	, L300mm	
SL.StiS204	Glass Rod, Φ8, L300mm	
SL.StiS205	, L350mm	

(2) L400~650mm Length

		Ea. Price,₩
SL.StiS206	Glass Rod, Φ8, L400mm	
SL.StiS207	, L500mm	
SL.StiS208	Glass Rod, Φ10, L450mm	
SL.StiS209	, L500mm	
SL.StiS210	, L650mm	

Glass Double-ended Stirring Rods

SciLab® DURAN glass Double-ended Stirring Rod, Φ6 ~ Φ10mm, L200 ~ L500mm
Useful for Crushing Clumped Powder and Solids, Borosilicate Glass α 3.3

■ ***Made of DURAN® Borosilicate Glass 3.3 Rod : by SciLab Korea.***
∗ With Rounded Button and Paddle Ends for Extra Safety and to Minimize Scratching
∗ Button End is Useful for Crushing Clumped Powder and Solids

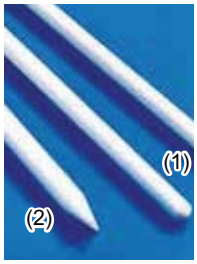
(1) L200~300mm Length

		Ea. Price,₩
SL.StiS211	2-end Rod, Φ6, L200mm	
SL.StiS212	, L250mm	
SL.StiS213	, L300mm	
SL.StiS214	2-end Rod, Φ9, L300mm	

(2) L350~500mm Length

		Ea. Price,₩
SL.StiS215	2-end Rod, Φ9 , L350mm	
SL.StiS216	, L400mm	
SL.StiS217	2-end Rod, Φ10, L450mm	
SL.StiS218	, L500mm	

Articles	Cat. No	Description



Cowie® PTFE Handy Stirring Rod, with Steel-core or Solid PTFE, Φ6/8×L200~400mm
With Steel-core or Solid PTFE, −200℃~+280℃, Teflon **핸디 교반봉**

■ ***Made in U.K.*** ＊Can be Bent into a Permanent Shape

(1) With PTFE/Steel Core

		Ea. Price,₩
CW.003.250	PTFE/Steel Rod, Φ6×L250 mm	
CW.003.300	, Φ6×L300 mm	
CW.003.350	, Φ6×L350 mm	
CW.003.400	, Φ6×L400 mm	

(2) With Solid PTFE, Tapered End

		Ea. Price,₩
CW.003.1200	PTFE Rod, Φ8×L200 mm	
CW.003.1250	, Φ8×L250 mm	
CW.003.1300	, Φ8×L300 mm	

Azlon® PTFE Handy Stirring Rods, Φ6mm, L150~400mm
With Steel-Core, Heat/Corrosion Resistance, −200℃~+260℃, PTFE **핸디 교반봉**

■ ***Made in U.K.*** ＊Suitable for Stirring Even the Most Corrosive Liquids
＊Will Withstand 260℃ ＊PTFE Covered with Plain Ends ＊6mm Diameter

		Ea. Price,₩
Az.SWN542	PTFE/Steel Rod, Φ6×L150 mm	
Az.SWN544	, Φ6×L200 mm	
Az.SWN546	, Φ6×L250 mm	

		Ea. Price,₩
Az.SWN548	PTFE/Steel Rod, Φ6×L300 mm	
Az.SWN550	, Φ6×L350 mm	
Az.SWN552	, Φ6×L400 mm	

PP T-shaped & Triangle- Stirring Rod/Cell Spreader, Sterile, L140 & 215mm NEW
Made of Polypropylene(PP), Blue Color, Individually Packed, **멸균 삼각- & T-교반봉/셀 스프레더**

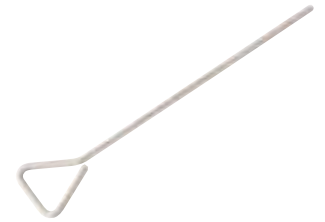
■ ***Supplied by ABDOS® in India*** ＊Made of Polypropylene(PP), Autoclavable at 121℃
＊Designed to Spread and Disperse Liquid onto the Surface of an Agar-plate without Gouging or Cutting the Medium
＊Individually Wrapped Package ＊Sterilized according to EN ISO 11137-2

		Ea. Price, ₩	Cs. Price, ₩
DH.Spr3001	Spreader, PP, Total-L140mm, Blade width×35mm, T-shaped		100ea
DH.Spr3003	-L215mm, Blade width×30mm, Triangle-shaped		400ea

Stainless-steel Stirring Rod/Cell Spreader, L165/242mm NEW
For Bacteriological Applications, Autoclavable, **삼각 교반봉/셀 스프레더, 다용도**

■ ***Supplied by SciLab Korea*** ＊Smooth Triangular ends for Smooth Spreading
＊Ideal for Spreading and Dispersing, Distribution of Bacterial Substances on Solid Nutrient Media

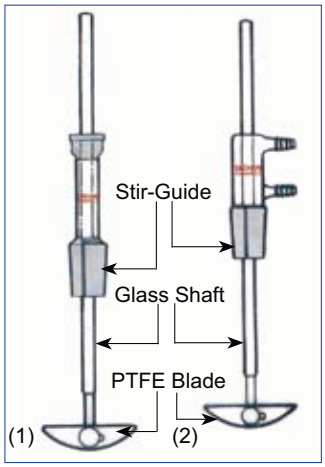
		Ea. Price, ₩
SL.Spr7001	Cell Spreader/Stirring Rod, STS, L165×Blade width 35mm	
SL.Spr7002	, L165×Blade width 45mm	
SL.Spr7003	, L200×Blade width 30mm	



Hammacher® Hi-grade Stainless-steel Stirring Rod/Cell Spreader, L195/150mm
For Bacteriological Applications, **삼각 교반봉/셀스프레더/Prigalski-스패츌러 겸용, 다용도**

■ ***Made in Germany*** ＊For even Spreading, Better Distribution Across Media, or Mixing Different Liquids
＊Made of Wironit™, 18/12 Stainless-steel (STS), Anti-magnetic, Rustless, Acid resistant, MP 1,400℃

		Ea. Price, ₩
HA.HWN072.19	Cell Spreader/Stirring Rod, STS, L195×Blade width 35mm	
HA.HWN074.15	, L150×Blade width 25mm	



SciLab® DURAN glass Stir-Guide Set, for 50~10000㎖ Stirring Glass, 유리 교반봉 셋트

■ ***Made of Original DURAN® Borosilicate Glass 3.3 : by SciLab Korea.*** ＊with PTFE Blade/Impeller
＊Stir-Guide : od.Φ15×id.Φ10mm, internal Ground ＊Shaft / Rod : Φ10mm Ground.

(1) General-type

		Ea. Price, ₩
SL.StiS221	for-50~500 ml , L : 400 mm, ⧩24/40, Blade w52×h14 mm	
SL.StiS222	-500~5000 ml , L : 450 mm, ⧩24/40, Blade w76×h19 mm	
SL.StiS223	-500~5000 ml , L : 450 mm, ⧩34/45, Blade w75×h25 mm	
SL.StiS224	-2000~10000 ml, L : 500 mm, ⧩45/50, Blade w125×h25 mm	

(2) Water Cooled-type

		Ea. Price, ₩
SL.StiS226	for-500~5000 ml , L : 450 mm, ⧩24/40, Blade w76×h19 mm	
SL.StiS227	-500~5000 ml , L : 450 mm, ⧩34/45, Blade w75×h25 mm	
SL.StiS228	-2000~10000 ml, L : 500 mm, ⧩45/50, Blade w125×h25 mm	

Spare ⧩ Stirrer-Guide(Seal), with Internal Ground Φ10mm

		Ea. Price, ₩
SL.StiS231	Stir-Guide, id Φ10×2.5mm, ⧩24/40	
SL.StiS232	, ⧩29/42	
SL.StiS233	, ⧩34/45	

Articles	Cat. No	Description

SciLab® DURAN glass Lubri-Stir-Guide/Seal, for Φ8 & Φ10mm shafts, ⧲24/40 & ⧲34/45
With Red PBT Opentop Screwcap & PTFE/Silicone O-ring Seal, 루부리 스터러 씰

■ ***Made of Original DURAN® PBT Screw Seal Kit / Borosilicate Glass 3.3 : by SciLab Korea***

∗ The Cup : To Accept a Suitable Sealing Lubricants <Ex.> : Glycerol, Liquid Paraffin, Spindle Oil, etc.

(1) for Φ8mm Stir-Shaft

		Ea.	Price, ₩
SL.StiS235	Lubri-Stir-Guide, for Φ8mm Rod, GL18, ⧲24/40		
SL.StiS236	, GL25, ⧲34/45		

(2) for Φ10mm Stir-Shaft

		Ea.	Price, ₩
SL.StiS237	Lubri-Stir-Guide, for Φ10mm Rod, GL18, ⧲24/40		
SL.StiS238	, GL25, ⧲34/45		

SciLab® Vacuum Stirrer-Guide, with DURAN® PBT Opentop Cap & PTFE/ Silicone O-Ring Seal and ⧲24/- ~ 45/-Glass joints
For Φ8~14mm Shafts, with Red PBT Screw Grip System, Chemically Inert, 200℃ Stable, 스크류 스터러 씰

■ ***Made of DURAN® Borosilicate Glass α 3.3 and Seal Kit with PBT GL-Opentop Screwcap / PTFE-Silicone O-Ring Seal : by SciLab Korea.***

(1) with ASTM ⧲24/40 ~ 45/50 Joints

		Ea. Price,₩
SL.StiS241	for Φ8 mm Rod , GL25, 24/40	
SL.StiS242	, 29/42	
SL.StiS243	, 34/45	
SL.StiS245	for Φ10mm Rod, GL25, 24/40	
SL.StiS246	, 29/42	
SL.StiS247	, GL32, 34/45	
SL.StiS251	for Φ12mm Rod, GL32, 34/45	
SL.StiS252	, 45/50	
SL.StiS253	for Φ14mm Rod, GL32, 34/45	
SL.StiS254	, 45/50	

(2) with DIN ⧲24/29 ~ 45/40 Joints

		Ea. Price,₩
SL.StiS241D	for Φ8 mm Rod , GL25, 24/29	
SL.StiS242D	, 29/32	
SL.StiS243D	, 34/35	
SL.StiS245D	for Φ10mm Rod, GL25, 24/29	
SL.StiS246D	, 29/32	
SL.StiS247D	, GL32, 34/35	
SL.StiS251D	for Φ12mm Rod, GL32, 34/35	
SL.StiS252D	, 45/40	
SL.StiS253D	for Φ14mm Rod, GL32, 34/35	
SL.StiS254D	, 45/40	

SciLab® PTFE Stirrer-Guide/Seal, for Φ8~Φ14mm Shafts, with ⧲24/-, ⧲29/-, and ⧲34/-Joints
With 2 Bearings / Screw-Retainer / Viton O-ring, All PTFE, −180~+260℃ Stable, PTFE 스터러 씰

■ ***Made in Korea*** ■ ***Common-use : to ASTM & DIN-type Socket Joints***

(1) for Φ8mm Stir-Shaft

		Ea. Price,₩
SL.Ada405	for Φ8mm Rod, ⧲24/40	
SL.Ada406	, ⧲29/42	
SL.Ada407	, ⧲34/45	

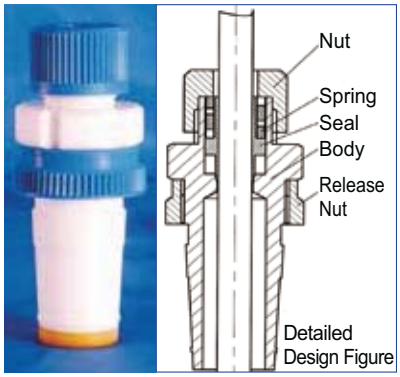
(2) for Φ10mm Stir-Shaft

		Ea. Price,₩
SL.Ada409	for Φ10mm Rod, ⧲24/40	
SL.Ada410	, ⧲29/42	
SL.Ada411	, ⧲34/45	

(3) for Φ12 & 14mm Stir-Shaft

		Ea.	Price, ₩
SL.Ada413	PTFE Stir-Guide, for Φ12mm Rod, ⧲34/45		
SL.Ada415	, for Φ14mm Rod, ⧲34/45		

⧲Joint-Screw-NPT-PTFE/PEEK High-class Vacuum Stirrer Guide, with ASTM/DIN ⧲Glass Cone Joint, for Φ8~16mm Shaft
Ideal for Middle/Low-Vacuum, 500/800rpm, Chemically Inert, −200℃~+280℃ Stable, 고품질 진공 ⧲교반 씰



for Low/Middle Vacuum/Pressure

■ ***Made of UK.*** ■ ***Suitable for Glass Same Size Socket of ASTM or DIN***

∗ PTFE in the only Media Contact Material

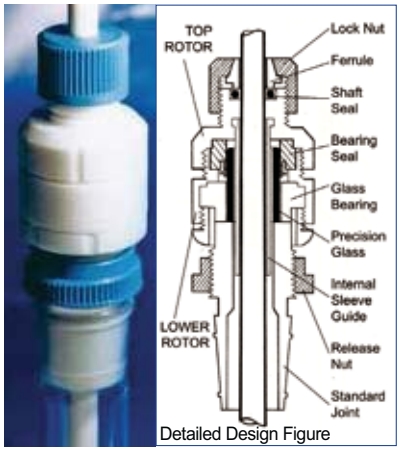
(1) for ASTM Socket Joint Sizes ; for Φ8~16mm Shaft

		Ea.	Price, ₩
CW.005.0.0824	Stirrer Seal, USA-type, for-Φ 8mm Shafts, ⧲24/40 Joint		
CW.005.0.1024	-Φ10mm Shafts, ⧲24/40 Joint		
CW.005.0.1034	-Φ10mm Shafts, ⧲34/45 Joint		
CW.005.0.1434	-Φ14mm Shafts, ⧲34/45 Joint		
CW.005.0.1634	-Φ16mm Shafts, ⧲34/45 Joint		

(2) for DIN/ISO Socket Joint Sizes ; for Φ8~16mm Shaft

		Ea.	Price, ₩
CW.005.00.0824	Stirrer Seal, EUROPE-type, for-Φ 8mm Shafts, ⧲24/29 Joint		
CW.005.00.1029	-Φ10mm Shafts, ⧲29/32 Joint		
CW.005.00.1045	-Φ10mm Shafts, ⧲45/40 Joint		
CW.005.00.1434	-Φ14mm Shafts, ⧲34/35 Joint		
CW.005.00.1645	-Φ16mm Shafts, ⧲45/40 Joint		

Articles	Cat. No	Description



for High Vacuum / Pressure

Cowie® High-Vacuum / Pressure Stirrer Guide, ㅎ PTFE/PEEK/Glass-Bearing Seal
For Φ8~16mm Shafts, Useable up to 800rpm, 280℃ Stable, **고진공/압력용 교반 씰**

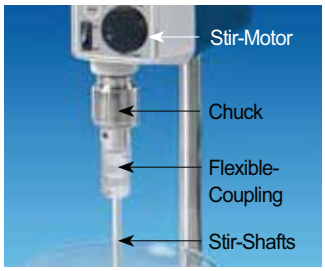
■ ***Made in U.K.*** ■ ***High Vacuum 5mmHg & Pressure 3~5psi Performance***
∗ Anti-Whip, Reduced Vibration, No-Shedding, Self-Releasing Joint Ring, Totally Inert.
∗ Specially Fabricated Glass Ball-Bearing & PTFE/PEEK Seal : Useable up to 800rpm

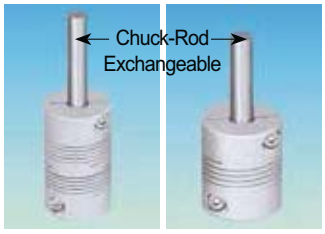
(1) for ASTM Socket Joint Sizes ; for Φ8~16 mm Shafts

		Ea. Price, ₩
CW.005.1047	Stirrer Seal, USA-type, for-Φ 8mm Shafts, ㅎ24/40 Joint	
CW.005.1057	-Φ10mm Shafts, ㅎ24/40 Joint	
CW.005.1067	-Φ10mm Shafts, ㅎ29/42 Joint	
CW.005.1097	-Φ14mm Shafts, ㅎ34/45 Joint	
CW.005.1117	-Φ16mm Shafts, ㅎ34/45 Joint	

(2) for DIN/ISO Socket Joint Sizes ; for Φ10~16 mm Shafts

		Ea. Price, ₩
CW.005.2067	Stirrer Seal, EUROPE-type, for-Φ10mm Shafts, ㅎ29/32 Joint	
CW.005.2077	-Φ10mm Shafts, ㅎ34/35 Joint	
CW.005.2097	-Φ14mm Shafts, ㅎ34/35 Joint	
CW.005.2127	-Φ16mm Shafts, ㅎ45/40 Joint	





(1) Hi-flex Metal for Φ6~16 Shafts | (2) Heavy-duty Metal for Φ10~16 Shafts

(3) Rubber Based for Φ7~10 Shafts

Flexible Coupling, for Safety Stirring of Φ6~16mm Shafts of Overhead Stirrers
For Stirrers between Stirring Motor and Shaft, **안전교반용 유연성 커플링**

■ ***Used to Compensate Any Vibrations Between The Motor and Stirring Shafts***
∗ Made in Korea ∗ Shaft Fastening by Screw Clamp Band ∗ Made of DURALUMIN
∗ with Exchangeable STS Chucking Rod Φ8 / 10 / 12mm, L40mm

(1) UTILITY High-Flex. Metal Coupling, with 2×Flex-band, for Φ6~16mm Stir-Shafts
Ideal for Low/High Viscosity and High/Low Speed

		Ea. Price, ₩
SL.StiC011	Stir-Coupling, Hi-flex, Φ8mm Chuck-rod , for-Φ6mm Stir-Shaft , 56g , Φ25×h44mm	
SL.StiC012	-Φ8mm Stir-Shaft , 53g , Φ25×h44mm	
SL.StiC013	-Φ10mm Stir-Shaft, 49g , Φ25×h44mm	
SL.StiC014	Stir-Coupling, Hi-flex, Φ10mm Chuck-rod, for-Φ8mm Stir-Shaft , 49g , Φ25×h44mm	
SL.StiC015	-Φ10mm Stir-Shaft, 43g , Φ25×h44mm	
SL.StiC016	-Φ12mm Stir-Shaft, 33g , Φ25×h44mm	
SL.StiC017	Stir-Coupling, Hi-flex, Φ12mm Chuck-rod, for-Φ10mm Stir-Shaft, 33g , Φ25×h44mm	
SL.StiC018	-Φ12mm Stir-Shaft, 123g, Φ32×h60mm	
SL.StiC019	-Φ14mm Stir-Shaft, 120g, Φ32×h60mm	
SL.StiC020	-Φ16mm Stir-Shaft, 118g, Φ32×h60mm	

(2) Heavy-duty Metal Coupling, with Short Flex-band, for Φ10~16mm Stir-Shafts
Low-Flexible type, Ideal for High Viscosity and Middle/Low Speed

		Ea. Price, ₩
SL.StiC023	Stir-Coupling, Low-flex, Φ10mm Chuck rod, for-Φ10mm Stir-Shafts, 45g , Φ25×h30	
SL.StiC024	-Φ12mm Stir-Shafts, , Φ25×h30	
SL.StiC025	Stir-Coupling, Low-flex, Φ12mm Chuck rod, for-Φ12mm Stir-Shafts, 105g, Φ32×h38	
SL.StiC026	-Φ14mm Stir-Shafts, , Φ32×h38	
SL.StiC027	-Φ16mm Stir-Shafts, , Φ32×h38	

(3) Very Flexible Rubber Based Coupling, for Φ7~10mm Shafts
Especially, Ideal for GLASS Shafts and Low/Middle Viscosity & High Speed

∗ Made in Germany ∗ Shaft Fastening by Screw Compression Rubber Ring Pad.
∗ with Φ10×L40mm Exchangeable Stainless-steel Chucking Rod

		Ea. Price, ₩
WI.1445000	Stir-Coupling, Rubber Based, for Φ7~Φ10mm Shafts, 72.5g, Body Φ46×h80mm	

SciLab® Stainless-steel Stirring Shaft, for Lab & Industrial Overhead Stirrers, Rod Φ8~12×L500~1000mm
Ideal for Universal-use of Wide-range Speed & Viscosity, **스텐레스 교반봉 / 임펠러**

(1) 3-bladed Propeller-type Universal-use

■ ***Made in Korea*** ■ ***Made of Rustless Stainless-steel #304***
■ ***Recommended to use with Flexible Coupling for Gentle Stirring & Safety Working***
■ ***The Rod may be Cut to Any Length with a Hacksaw*** ■ ***Good Finished : Surface & Stirring Center***

(1) 3-bladed Propeller-type, ideal for Universal-use in Middle/High Speed
with Rod Φ8~12×L500~1000, Rotor Φ50~140 mm, and Good for Low/Middle Viscosity

∗ Designed for Efficient Flow : mixed from Top to Bottom of Vessel ∗ Minimum Shearing

		Ea. Price, ₩
SL.StiS721	Stir-Shaft, **"S721"**, #304, Rod-Φ8×L500 , Rotor-Φ50×h15 mm	
SL.StiS722	, **"S722"**, -Φ8×L500 , -Φ60×h15 mm	
SL.StiS723	, **"S723"**, -Φ8×L650 , -Φ80×h20 mm	
SL.StiS724	, **"S724"**, -Φ8×L650 , -Φ100×h24 mm	
SL.StiS726	Stir-Shaft, **"S726"**, #304, Rod-Φ10×L500 , Rotor-Φ60×h15 mm	
SL.StiS727	, **"S727"**, -Φ10×L650 , -Φ80×h20 mm	
SL.StiS728	, **"S728"**, -Φ10×L800 , -Φ100×h24 mm	
SL.StiS729	Stir-Shaft, **"S729"**, #304, Rod-Φ12×L1000, Rotor-Φ140×h30 mm	

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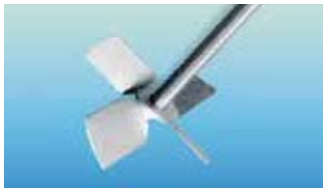
Articles	Cat. No	Description

<*Continued From...* SciLab® Stainless-steel Stirring Shaft>



(2) 4-bladed Propeller-type Standard-model

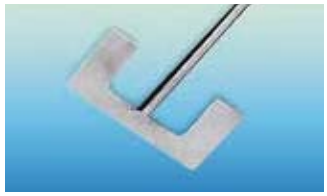
(2) Standard 4-bladed Propeller-type, ideal for Low/Middle Speed & Viscosity Popular-model, with Rod Φ8~12×L500~1000, Rotor Φ50~140 mm, 45°Angled

		Ea. Price, ₩
SL.StiS731	Stir-Shaft, **"S731"**, #304, Rod-Φ8×L500 , Rotor-Φ50×h20 mm	
SL.StiS732	, **"S732"**, -Φ8×L500 , -Φ70×h25 mm	
SL.StiS733	, **"S733"**, -Φ8×L650 , -Φ90×h35 mm	
SL.StiS734	, **"S734"**, -Φ8×L650 , -Φ110×h35 mm	
SL.StiS736	Stir-Shaft, **"S736"**, #304, Rod-Φ10×L650 , Rotor-Φ90×h35 mm	
SL.StiS737	, **"S737"**, -Φ10×L800 , -Φ110×h40 mm	
SL.StiS738	, **"S738"**, -Φ10×L1000, -Φ110×h40 mm	
SL.StiS739	Stir-Shaft, **"S739"**, #304, Rod-Φ12×L1000, Rotor-Φ140×h40 mm	

(3) 4-bladed Dissolver Diamond-type

(3) 4-bladed Dissolver Diamond-type, Good for Particle Reduction in Middle/High Speed with Rod Φ8 & 10×L500~650, Rotor Φ70~110mm, and Good for Low/Middle Viscosity

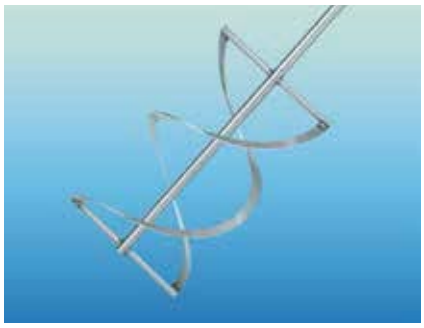
		Ea. Price, ₩
SL.StiS741	Stir-Shaft, **"S741"**, #304, Rod-Φ8×L500 , Rotor-Φ70×h20 mm	
SL.StiS742	, **"S742"**, -Φ8×L500 , -Φ90×h25 mm	
SL.StiS743	, **"S743"**, -Φ8×L650 , -Φ110×h25 mm	
SL.StiS744	Stir-Shaft, **"S744"**, #304, Rod-Φ10×L650, Rotor-Φ110×h25 mm	



(4) Heavy-duty Anchor-type

(4) Heavy-duty Anchor-type, ideal for Middle/High Viscosity, Rod Φ8~12mm Good for Low/Middle Speed, Rotor Φ70~180mm

		Ea. Price, ₩
SL.StiS751	Stir-Shaft, **"S751"**, #304, Rod-Φ8×L500 , Rotor-Φ70×h14 mm	
SL.StiS752	, **"S752"**, -Φ8×L650 , -Φ90×h16 mm	
SL.StiS753	Stir-Shaft, **"S753"**, #304, Rod-Φ10×L650 , Rotor-Φ90×h16 mm	
SL.StiS754	, **"S754"**, -Φ10×L800 , -Φ140×h25 mm	
SL.StiS755	, **"S755"**, -Φ10×L1000, -Φ160×h30 mm	
SL.StiS757	Stir-Shaft, **"S757"**, #304, Rod-Φ12×L1000, Rotor-Φ180×h30 mm	



(5) Heavy-duty Helical Ribbon-type

(5) Heavy-duty Helical Ribbon-type, ideal for Middle/High Viscosity and Lab~Industry with Rod Φ8~12mm, L500~1000, Rotor Φ60~190mm, Good for Reaction-system

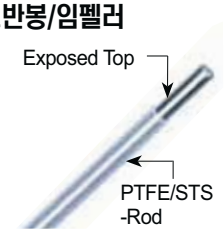
* Patented Helical Ribbon High Efficient Mixing Performance * Generates Axial Flow.
* Designed for Middle / High Viscosity. High Flow Rate and Efficient Mixing.
* For Homogeneous Mixing and Medium is Conveyed from the Bottom upwards.

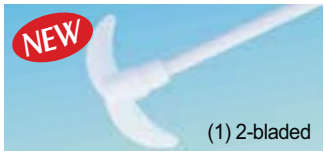
		Ea. Price, ₩
SL.Sti761	Stir-Shaft, **"S761"** , #304, Rod-Φ8×L500 , Rotor-Φ60×h100 mm	
SL.Sti762	, **"S762"** , -Φ8×L650 , -Φ80×h130 mm	
SL.Sti762.1	Stir-Shaft, **"S762.1"**, #304, Rod-Φ10×L650 , Rotor-Φ100×h160 mm	
SL.Sti763	, **"S763"** , -Φ10×L650 , -Φ115×h175 mm	
SL.Sti764	, **"S764"** , -Φ10×L800 , -Φ125×h190 mm	
SL.Sti765	, **"S765"** , -Φ10×L1000, -Φ160×h240 mm	
SL.Sti766	Stir-Shaft, **"S766"** , #304, Rod-Φ12×L1100, Rotor-Φ190×h290 mm	

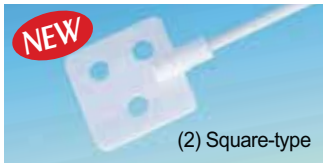
PTFE Stirring Shaft, with Stainless-steel Insert, for Lab & Industrial Overhead Stirrers, Rod Φ8 & 10 × L300~650mm NEW

With Centrifugal & Square-type, High Temperature Resistant and Corrosion-Proof, −200℃+260℃, Normal-grade, PTFE 교반봉/임펠러

- ***Supplied by SciLab Korea***
- ***Recommended to Use with a Flexible Coupling for Gentle Stirring & Safety Working***
- ***The PTFE Rod with Stainless-steel Insert : ① OD Φ8mm with Φ6mm Steel Insert-"Φ8/6"***
  ② OD Φ10mm with Φ8mm Steel Insert-"Φ10/8"
- ***Ideal for PURE-Working / Chemically Inert / Non-Contaminating / Thermally Stable***
- ***Exposed Top Rod 4~5cm (Stainless-steel Core) : For Strong Clamping in the Stir-Chuck or Flexible Coupling.*** ⇒







(1) 2-bladed Centrifugal-type

		Ea. Price, ₩
SL.Sti4091	PTFE Stirring Rod, Φ8/6×L300mm , Swing rotor-Φ63mm×h24mm	
SL.Sti4092	, Φ8/6×L400mm , -Φ80mm×h25mm	
SL.Sti4093	, Φ8/6×L500mm , -Φ100mm×h30mm	
SL.Sti4094	, Φ8/6×L600mm , -Φ110mm×h34mm	
SL.Sti4095	, Φ10/8×L650mm, -Φ110mm×h34mm	

(2) Square-type, with Φ12mm Three Holes

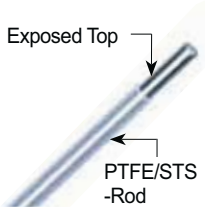
		Ea. Price, ₩
SL.Sti4098	PTFE Stirring Rod, Φ10/8×L350mm, Rotor 70×70mm×t4mm, 3×Φ12mm Hole	
SL.Sti4099	, Φ10/8×L450mm, Rotor 70×70mm×t4mm, 3×Φ12mm Hole	

Articles	Cat. No	Description

SciLab® Hi-grade PTFE Stirring Shaft, with Stainless-steel Insert, for Overhead Stirrers, Rod Φ8~14×L500~1100mm

Ideal for PURE Working & Universal-use of Wide-range Speed & Viscosity, Chemically Inert, −200℃+280℃-stable, PTFE 교반봉/임펠러

- ***Made in Korea*** ■ ***Recommended to Use with a Flexible Coupling for Gentle Stirring & Safety Working.***
- ***The PTFE Rod with Stainless-steel Insert :***
  ① OD Φ8mm with Φ6mm Steel Insert-"Φ8/6", ② OD Φ10mm with Φ8mm Steel Insert-"Φ10/8",
  ③ OD Φ12mm with Φ10mm Steel Insert-"Φ12/10" , and ④ OD Φ14mm with Φ12mm Steel Insert-"Φ14/12".
- ***Rod may be Cut to Any Length with a Hacksaw.***
- ***Ideal for PURE-Working / Chemically Inert / Non-Contaminating /Thermally Stable, -200℃+280℃-stable.***
- ***Exposed Top Rod 4~5cm (Stainless-steel Core) : For Strong Clamping in the Stir-Chuck or Flexible Coupling.*** ⇒



(1) 2-bladed Centrifugal-type
Good for Narrow-Neck
<ex> ⅀24/- & 34/-Joint neck

(1) 2-bladed Centrifugal-type, ideal for ⅀24/- & ⅀34/-Joints(Narrow) Necks & Low Viscosity with Rod Φ8 & 10×L500~650, Rotor Φ50~100 mm, and Good for Middle/High Speed

		Ea. Price, ₩
SL.StiS403	Stir-Shaft, PTFE, Rod-Φ8/6×L500 , Swingrotor-Φ50×h14 mm , fit to ⅀24/-joints	
SL.StiS404	-Φ8/6×L500 , -Φ70×h17 mm , fit to ⅀24/-joints	
SL.StiS405	-Φ8/6×L650 , -Φ100×h24 mm, fit to ⅀34/-joints	
SL.StiS406	Stir-Shaft, PTFE, Rod-Φ10/8×L650, Swingrotor-Φ100×h24 mm, fit to ⅀34/-joints	

(2) Standard 4-bladed
Propeller-type

(2) Standard 4-bladed Propeller-type, ideal for Low/Middle Speed and High Viscosity Good for Reactors, with Rod Φ8~14×L500~1100 and Rotor Φ50~140 mm, 45°Angled

∗ Standard Stirring Shafts. ∗ Designed for Efficient Mixing : from Top to Bottom of Vessel

		Ea. Price, ₩
SL.StiS410	Stir-Shaft, PTFE, Rod-Φ8/6×L500 , Rotor-Φ50×h20mm	
SL.StiS411	-Φ8/6×L500 , -Φ70×h25mm	
SL.StiS412	-Φ8/6×L650 , -Φ70×h25mm	
SL.StiS413	Stir-Shaft, PTFE, Rod-Φ10/8×L650 , Rotor-Φ90×h35mm , Good for 5~10Lit Vessels	
SL.StiS414	-Φ10/8×L800 , -Φ90×h35mm , Good for 10~20Lit Vessels	
SL.StiS415	-Φ10/8×L1000 , -Φ90×h35mm , Good for 20~50Lit Vessels	
SL.StiS416.1	Stir-Shaft, PTFE, Rod-Φ12/10×L800 , Rotor-Φ110×h40mm, Good for 10~20Lit Vessels	
SL.StiS416.2	-Φ12/10×L1000, -Φ110×h40mm, Good for 30~50Lit Vessels	
SL.StiS416.3	-Φ12/10×L1000, -Φ140×h40mm, Good for 30~80Lit Vessels	
SL.StiS417	Stir-Shaft, PTFE, Rod-Φ14/12×L1100, Exchangeable Rotor-Φ140×h40mm, Good for 50~100Lit Reactors	

(3) with 2-Rotors, Propeller-type

(3) with 2-Exchangeable Rotors of 4-bladed Propeller-type, for 20~100Lit Reaction Vessels Ideal for High Viscosity/ Large Volume Stirring, with Rod Φ12 & 14×L 800~1100 mm

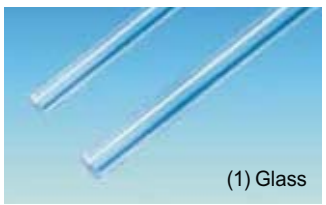
∗ Translucent PFA Shaft with Stainless-steel Insert, Totally Chemical Inert

		Ea. Price, ₩
SL.StiS416.4	Stir-Shaft, PTFE, for 20~30Lit, Rod-Φ12/10×L800, 2-Rotors of (1) Exchangeable 1st Rotor Φ110×h40 and (2) Bottom Rotor Φ110×h40mm	
SL.StiS418	Stir-Shaft, PTFE, for 30~80Lit, Rod-Φ12/10×L1000, 2-Rotors of (1) Exchangeable 1st Rotor Φ110×h40 and (2) Bottom Rotor Φ140×h40mm	
SL.StiS419	Stir-Shaft, PTFE, for 50~100Lit, Rod-Φ14/12×L1100, 2-Rotors of (1) Exchangeable 1st Rotor Φ140×h40 and (2) Bottom Rotor Φ140×h40mm	

(4) Heavy-duty Anchor-type

(4) Heavy-duty Anchor-type, ideal for Middle/High Viscosity, Rod Φ8~12mm Good for Low/Middle Speed, Rotor Φ80~140 mm, [UK.-made]

		Ea. Price, ₩
CW.005.340.82	Shaft, Φ8×L400mm Rod , Φ80mm Anchor	
CW.005.350.82	, Φ8×L500mm Rod , Φ80mm Anchor	
CW.005.355.2	, Φ10×L550mm Rod, Φ100mm Anchor	
CW.005.0365.102	, Ex-type, Φ10×L650mm Rod , Φ140mm Anchor	
CW.005.0375.102	, Φ10×L750mm Rod , Φ140mm Anchor	
CW.005.0375.122	, Φ12×L750mm Rod , Φ140mm Anchor	
CW.005.03100.122	, Φ12×L1000mm Rod, Φ140mm Anchor	



(1) Glass

Glass & PFA (Stainless-steel Insert) PLAIN Shaft, for Exchangeable Rotor

For Exchangeable Rotor, [Korean-made], 글라스 및 스텐심 PFA봉

(1) DURAN® Glass Shaft, Round Ends, Boro-glass 3.3, Φ8 & 10, L400~650mm

∗ Good for Eco-Pure Work

		Ea. Price,₩			Ea. Price,₩
SL.StiS206	Glass Shaft, Φ8×L400mm		**SL.StiS208**	Glass Shaft, Φ10×L450mm	
SL.StiS207	, Φ8×L500mm		**SL.StiS209**	, Φ10×L550mm	
			SL.StiS210	, Φ10×L650mm	

(2) PFA

(2) PFA with Stainless-steel Insert Shaft, Φ8~14×L500~1100mm

∗ The Rod may by Cut to Any Length with a Hacksaw ∗ Translucent PFA, Totally Chemical Inert, -200℃ +260℃

		Ea. Price,₩			Ea. Price,₩
SL.StiS451	Shaft, PFA, Φ8/6×L500mm		**SL.StiS455**	Shaft, PFA, Φ10/8×L800mm	
SL.StiS452	, Φ8/6×L650mm		**SL.StiS456**	, Φ12/10×L800mm	
SL.StiS453	, Φ8/6×L800mm		**SL.StiS457**	, Φ12/10×L1000mm	
SL.StiS454	, Φ10/8×L650mm		**SL.StiS458**	, Φ14/12×L1100mm	

Articles	Cat. No	Description

(1) Glass-shaft

(2) PTFE-shaft

GLASS and PTFE/Steel Cored Shaft and PTFE Blade, Exchangeable
Ideal for ㉣24/- & ㉣34/-Joint (Narrow) Necks, 교체형 글라스 & PTFE 교반봉과 임펠러

∗ Glass Shafts : DURAN Borosilicate Glass 3.3 Rod Φ8 & 10mm : Made in Korea
∗ PTFE Encapsulated Stainless-steel Shafts Φ8 & 12mm, -200℃ +280℃ Stable : Made in U.K.

(1) GLASS-Shaft, Φ8/10, L400~600mm

		Ea. Price,₩
SL.StiS260	Glass-Shaft, Φ8, L400mm	
SL.StiS261	, L500mm	
SL.StiS262	, L600mm	

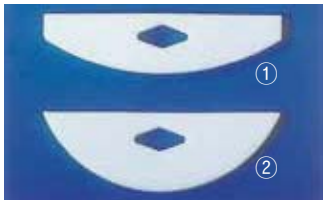
		Ea. Price,₩
SL.StiS265	Glass-Shaft, Φ10, L400mm	
SL.StiS266	, L500mm	
SL.StiS267	, L600mm	

(2) Cowie® PTFE/Steel Cored Shaft, Φ8 & 12mm, L400~750mm, without Blade

∗ The Rod may by Cut to Any Length with a Hacksaw

		Ea. Price,₩
CW.005.540.81	Shaft, PTFE, Φ8×L400mm	
CW.005.550.81	, Φ8×L500mm	
CW.005.555.1	, Φ10×L550mm	

		Ea. Price,₩
CW.005.565.1	Shaft, PTFE, Φ10×L650mm	
CW.005.0575.101	, Φ10×L750mm	
CW.005.0575.121	, Φ12×L750mm	



(3) PTFE Blade,
with Φ6.5 Connect-hole

(3) Cowie® PTFE Stir-Blade, Thick-3.2mm, Ideal for ㉣24/- & ㉣34/-Joint Necks

① with Square End, Fit to ㉣24/-Joints

		Ea. Price,₩
CW.002.052.1	Blade, Squ. 52×h14mm	
CW.002.076.1	. 76×h19mm	
CW.002.090.1	. 90×h28mm	

② with Plain End, Fit to ㉣34/-Joints

		Ea. Price,₩
CW.002.1065.1	Blade, Pla. 65×h25mm	
CW.002.1075.1	. 75×h25mm	
CW.002.1105.1	. 105×h25mm	
CW.002.1125.1	. 125×h25mm	
CW.002.1150.1	. 150×h25mm	

(1) "Screw Propeller" only
Φ50 ~ Φ140mm

All PTFE Adjustable / Exchangeable Rotor, Screw Propeller- & Turbine-type
For Shaft Φ8~16mm, PTFE 교체형/조절식 교반 임펠러

■ ***The Exchangeable Rotors fit to Φ8~16mm Rods and Lock in place with Screw Nut***

(1) SciLab® Exchangeable "Screw Propeller" Rotor, 45°Angled 4 Blade

∗ Made in Korea

		Ea. Price, ₩
SL.StiS461	Rotor, PTFE, for Shaft-Φ8, Rotor-Φ50×h20mm	
SL.StiS462	-Φ70×h25mm	
SL.StiS463	, for Shaft-Φ10, Rotor-Φ70×h25mm	
SL.StiS464	-Φ90×h35mm	
SL.StiS465	, for Shaft-Φ12, Rotor-Φ110×h40mm	
SL.StiS466	, for Shaft-Φ14, Rotor-Φ140×h40mm	

(2) "Turbine" Rotor Only
Φ50 ~ Φ150mm

(2) Cowie® Exchangeable "Turbine" Rotor only, Φ50~150mm

∗ Made in UK.

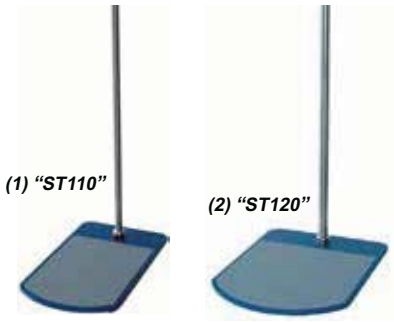
		Ea. Price, ₩
CW.005.90850	Rotor, PTFE, for Shaft-Φ8mm, Rotor-Φ50mm	
CW.005.90875	-Φ75mm	
CW.005.91075	, for Shaft-Φ10mm, Rotor-Φ75mm	
CW.005.910100	-Φ100mm	
CW.005.912100	, for Shaft-Φ12mm, Rotor-Φ100mm	
CW.005.916150	, for Shaft-Φ16mm, Rotor-Φ150mm	

(1) (2) (3) (4)

Kartell® PP & PVC Plastic Stirring Shaft, PP-Blade, PVC-Rod with Steel Core, Rod Φ8×L350mm
Good for Acid & Chemicals resistance, PP & PVC 플라스틱 교반봉/임펠러

■ ***Supplied by Kartell® in Italy***
■ ***Ideal for Acids, Chemicals and Anti-corrosion***
■ ***Material : PP-Blade, PVC-Rod with Steel Core : Φ8×L350 mm***

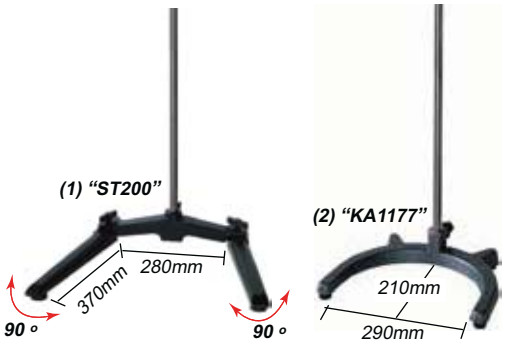
		Ea. Price, ₩
KA.428	(1) Stirring Paddle, with 2 fixed blade (w39×h15 mm), Rod Φ8×L350mm	
KA.430	(2) , "U" shaped blade (w65×h78 mm), Rod Φ8×L350mm	
KA.431	(3) , with 2 flexible paddle (Swing w57 mm), Rod Φ8×L350mm	
KA.432	(4) , with 2 flexible paddle (Swing w98 mm), Rod Φ8×L350mm	



DAIHAN® Premium Plate Stand, High Quality
With Stainless-steel Rod Φ16/23mm

■ ***Made in Korea*** ■ ***High-Quality Plate-type Stand with Support Rod***
■ ***Wide and Thick Steel Plate for Safety Mechanism*** ■ ***Silicon Rubber Pad adhered***
■ ***with 1.5P Screwed Support Rod made of Stainless-steel specially designed***

		Ea.	Price, ₩
DH.WOS501510	(1) **"ST110"** Standard Steel Plate Stand, Powder Coated, with Base Plate/Silico ne Pad, for Stirrer and Homogenizer, Base Plate w20×35cm **"RD 511"** 1.5P Screw Rod, Φ16×h800 mm		
DH.WOS501515	(2) **"ST120"** Wide Steel Plate Stand, Powder Coated, with Base Plate/Silicone Pad, for Stirrer and Homogenizer, Base Plate w30×40 cm **"RD 522"** 1.5P Screw Rod, Φ23×h1000 mm		



DAIHAN® Heavy Duty Safety Stand, High Safety
With Stainless-steel Rod Φ23mm

■ ***Made in Korea*** ■ ***Never Fall Down by Safety Mechanism.***
■ ***High-Safety H-/U-type Stand with Stainless-steel Support Rod***
■ ***Adjustable Foot Distance (ST200)***

(1) Adjustable Foot Distance Deluxe Safety Stand

		Ea.	Price, ₩
DH.WOS501520	Deluxe Safety Stand, **"ST200"**, H-type Base w39~75cm adjust, RodΦ23×h1200mm		

(2) U-type Safety Stand

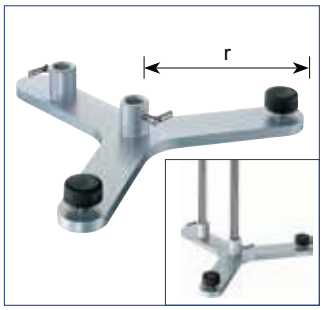
		Ea.	Price, ₩
DH.WOS1177	Safety Stand, **"KA1177"**, U-type Base w34/29×27/21cm, RodΦ23×h800mm		

Ideal for Overhead Stirrer

SciLab® Universal Jumbo Clamp Holder, Cast Aluminium, Grip Capa. Φ25mm
Ideal for Overhead Stirrer, Safety/Strong Grip Power, 만능점보홀더

■ ***Made in Korea*** ∗ Cast-Aluminium ∗ Ideal for Overhead Stirrers, Homogenizers, etc.

		Ea.	Price, ₩
SL.Cla8011	Clamp Holder, **"CL200"**, Cast Aluminum, Grip Capa. Φ25mm, L135mm		



Steel Retort Base Duo Stand

Steel Retort Base Duo Stand, for 2×Plain Rods of up to Φ16mm, without Rod
With Hinged Set Screw M6, Nonskid Feet equipped, 2×Level Screw Nut, and Base Thick-8mm

■ ***Made in Germany*** ∗ Can Fix Rods up to 2ea (Below Φ16mm)

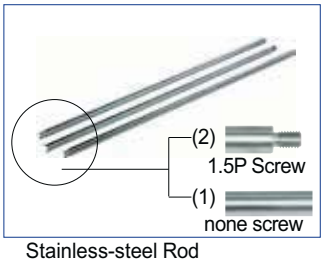
Retort Stand Base only

		Ea.	Price, ₩
US.2040	Stand Base only, **"US2040"**, r =150mm		
US.2041	, **"US2041"**, r =185mm		

Optional Stainless-steel Rod of Φ16mm, without Screw

		Ea.	Price, ₩
DH.WOS502001	Stainless-steel Rod, **"RD501"**, Φ16×h800mm , non-screw		
DH.WOS502002	, **"RD502"**, Φ16×h1000mm, non-screw		
DH.WOS502003	, **"RD503"**, Φ16×h1200mm, non-screw		

DAIHAN® Φ16 & 23mm High-Quality Stainless-steel (#304) Rod, for Stand Bases



Stainless-steel Rod
With or Without 1.5P Screw

(1) Plain-type Φ16mm Rod, without Screw

		Ea.	Price, ₩
DH.WOS502001	Stainless-steel Rod, **"RD501"**, Φ16×h800mm , non-screw		
DH.WOS502002	, **"RD502"**, Φ16×h1000mm, non-screw		
DH.WOS502003	, **"RD503"**, Φ16×h1200mm, non-screw		
DH.WOS502031	, **"RD531"**, Φ23×h800mm , non-screw		
DH.WOS502033	, **"RD533"**, Φ23×h1200mm, non-screw		

(2) 1.5P Screw-type Φ16 & 23mm Rod

		Ea.	Price, ₩
DH.WOS502011	Stainless-steel Rod, **"RD511"**, Φ16×h800mm , 1.5P Screw		
DH.WOS502012	, **"RD512"**, Φ16×h1000mm, 1.5P Screw		
DH.WOS502013	, **"RD513"**, Φ16×h1200mm, 1.5P Screw		
DH.WOS502021	, **"RD521"**, Φ23×h800mm , 1.5P Screw		
DH.WOS502022	, **"RD522"**, Φ23×h1000mm, 1.5P Screw		
DH.WOS502023	, **"RD523"**, Φ23×h1200mm, 1.5P Screw		

DAIHAN Scientific

Ultrasonic Cleaner

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Ultrasonic Cleaner - Analog ····· P. 245
- Digital ····· P. 246
- Remote Control, Large Capacity ··· P. 247

● Analog Ultrasonic Cleaner

"WUC-A"

● Digital Ultrasonic Cleaner

"WUC-D"

● Large Capacity Ultrasonic Cleaner

"WUC-N"

DAIHAN® Analog Ultrasonic Cleaner "WUC-A", Timer/Temp. Output Controller, with Certi. & Traceability, 1.2~22 Lit

With Stainless-steel Flat Lid, Highly Effective Cleaning, up to 85℃, 0~30min, 40kHz Frequency, without Basket

초음파 세척기, 온도 및 시간 설정, 고효율, 다용도, 리드 포함

10 Lit Analog Ultrasonic Cleaner with Flat Lid "WUC-A10H"

6 Lit Analog Ultrasonic Cleaner with Flat Lid "WUC-A06H"

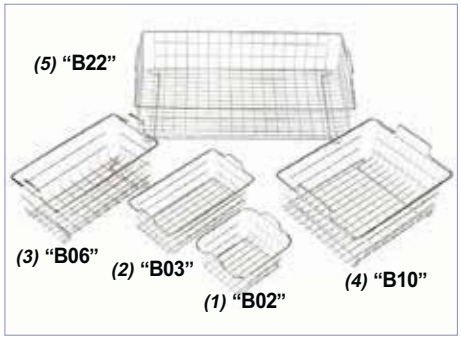
- ***Made in Korea*** ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Made of Stainless-steel, Finished Surface***
- ***Analog Controller, Timer, Temperature and Output Control***
- ***PL (Product Liability) Insurance***

* Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab Instruments by Ultrasonic Frequency
* Made of Stainless-steel, Finished Surface
* Analog Controller, Timer, Temperature and Output Control
* Temperature Range from Ambient to 85℃. (1.2 & 1.8 Lit : 65℃ Fixed)
* Convenient Preset Function : Heating and Timer
* HF-Frequency : 40kHz
* Bottom-Mounted Drain (WUC-A10H and WUC-A22H)
* Maximum 30 minutes of Cleaning Time (Except WUC-A10H)

Specifications & Ordering information

Spec. \ Model	"WUC-A01H" Max. Capa. 1.2 Lit	"WUC-A02H" Max. Capa. 1.8 Lit	"WUC-A03H" Max. Capa. 3.3 Lit	"WUC-A06H" Max. Capa. 6 Lit	"WUC-A10H" Max. Capa. 10 Lit	"WUC-A22H" Max. Capa. 22 Lit
Capacity	1.2 Lit	1.8 Lit	3.3 Lit	6 Lit	10 Lit	22 Li
Frequency	40KHz					
HF-Peak Out	72 W	75 W	124 W	168 W	265 W	379 W
Heating Temp.	65℃ Fixed	65℃ Fixed	ambient to 85℃	ambient to 85℃	ambient to 85℃	ambient to 85℃
Heating Power	86 W	86 W	172 W	172 W	258 W	275 W
Timer	None	0~30 min.	0~30 min.	0~30 min.	0~30 min.	0~30 min.
Drain-Valve	None	None	None	None	1/2″ NPT	1/2″ NPT
Tank Size inner (w×d×h) (mm)	150×135×60	150×135×100	240×140×100	290×150×150	290×240×150	500×300×150
Weight	1.8 kg	2.5 kg	4 kg	5.3 kg	7 kg	11 kg
Packing Dimension (w×d×h) (mm)	200×200×190	200×200×240	320×200×290	370×220×350	430×320×360	640×380×370
Gross Weight	3 kg	4 kg	5 kg	6 kg	7 kg	11 kg
Power Consumption	158 W	161 W	296 W	340 W	523W	654 W
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz					
Cat. No. 230V	DH.WUC.A01H	DH.WUC.A02H	DH.WUC.A03H	DH.WUC.A06H	DH.WUC.A10H	DH.WUC.A22H
Cat. No. 120V	DH.WUC.A101H	DH.WUC.A102H	DH.WUC.A103H	DH.WUC.A106H	DH.WUC.A110H	DH.WUC.A122H
Price, Each. ₩						

*** Other Specifications are available upon Customer's Request.**



Stainless-steel Wire Basket (Optional)

Optional Stainless-steel Wire Basket

		Ea. Price, ₩
DH.WUC.B02	(1) Basket, Wire, **"B02",** for 1.8 Lit, 144×131×h92mm	
DH.WUC.B03	(2) , **"B03",** for 3.3 Lit, 224×128×h83mm	
DH.WUC.B06	(3) , **"B06",** for 6 Lit, 267×136×h126mm	
DH.WUC.B10	(4) , **"B10",** for 10 Lit, 276×218×h132mm	
DH.WUC.B22	(5) , **"B22",** for 22 Lit, 467×275×h131mm	

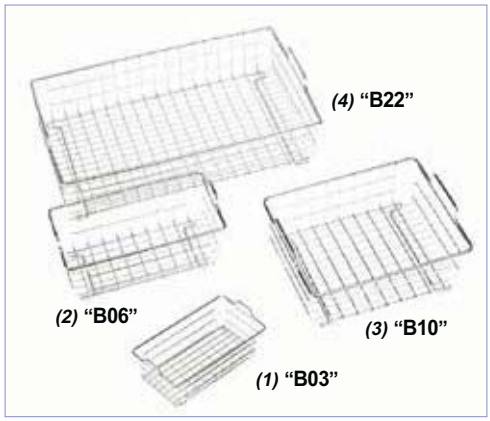
DAIHAN® Digital Ultrasonic Cleaner-set "WUC-D", Microprocessor Control, 3.3~22 Lit

With Stainless-steel Wire Basket & Flat Lid, Highly Effective Cleaning, up to 80℃, 0~60min, 40kHz Frequency

디지털 초음파 세척기 세트, 와이어 바스켓 및 리드 포함, 마이크로프로세서 제어

10 Lit Digital Ultrasonic Cleaner Set, "WUC- D10H" with Flat Lid and Wire Basket

3.3 Lit Digital Ultrasonic Cleaner Set , "WUC- D03H" with Flat Lid and Wire Basket



Stainless-steel Wire Basket (included)

- ***Made in Korea*** ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab Instruments by Ultrasonic Frequency***
- ***Microprocessor Control : Timer, Temperature and Output Control***
- ***PL (Product Liability) Insurance***

* Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab instruments by Ultrasonic Frequency
* Microprocessor Control : Timer, Temperature and Output Control
* Multi-Frequency Sonication Body
* HF-Frequency : 40kHz
* Temperature Range from Ambient to 80℃
* Convenient Preset Function : Heating and Timer
* Drain is mounted in the bottom (WUC-D10H, WUC-D22H)
* Maximum 60 minutes of Cleaning Time
* Very Strong Cleansing Degassing & Sweep Function

Specifications & Ordering information

Spec. \ Model	"WUC-D03H" Max. Capa. 3.3 Lit	"WUC-D06H" Max. Capa. 6 Lit	"WUC- D10H" Max. Capa. 10 Lit	"WUC-D22H" Max. Capa. 22 Lit
Capacity	3.3 Lit	6 Lit	10 Lit	22 Lit
Frequency	40kHz	40kHz	40kHz	40kHz
HF-peak out	100W	253W	407W	528W
Heat temp.	ambient to 80'℃	ambient to 80'℃	ambient to 80℃	ambient to 80℃
Heating Power	172W	172W	258W	344W
Timer	0~30 min.	0~60 min.	0~60 min.	0~60 min.
Display	FND			
Drain-valve	None	None	1/2″ NPT	1/2″ NPT
Tank Size inner (w×d×h) (mm)	240×140×100	290×150×150	290×240×150	500×300×150
Weight net	3.4 kg	5.8 kg	8 kg	12.9 kg
Packing Dimension (w×d×h) (mm)	320×200×290	360×220×350	440×320×360	640×380×370
Gross Weight	3.7 kg	6.3 kg	8.5 kg	13.4 kg
Power Consumption	290W	425W	665W	872W
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz			
Cat. No. 230V	DH.WUC.D03H	DH.WUC.D06H	DH.WUC.D10H	DH.WUC.D22H
Cat. No. 120V	DH.WUC.D103H	DH.WUC.D106H	DH.WUC.D110H	DH.WUC.D122H
Price, Each. ₩				

* **Other Specifications are available upon Customer's Request.**

Spare Wire Basket, Stainless-steel

		Ea. Price, ₩
DH.WUC.B03	(1) Basket, Wire, **"B03",** for 3.3 Lit, 224×128×h83mm	
DH.WUC.B06	(2) , **"B06",** for 6 Lit, 267×136×h126mm	
DH.WUC.B10	(3) , **"B10",** for 10 Lit, 276×218×h132mm	
DH.WUC.B22	(4) , **"B22",** for 22 Lit, 467×275×h131mm	

DAIHAN® Large Capacity Ultrasonic Cleaner-set "WUC-N", Remote Control System, 30~74 Lit

With Digital Remote Generator/Stainless-steel Flat Lid/Drain Valve, Highly Effective Cleaning, without Basket, up to 105℃, 40kHz

대용량 초음파 세척기 세트, 리모트 제너레이터 · 리드 · 드레인 밸브 포함

47 Lit Large Capacity Ultrasonic Cleaner-set Without Basket "WUC-N47H"

Stainless-steel Wire Basket (Optional)

- ***Made in Korea*** ***CE Certified***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System***
- ***Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab Instruments by Ultrasonic Frequency***
- ***Remote Generator : Power Control and Timer Function with LCD***
- ***PL (Product Liability) Insurance***

* Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab Instruments by Ultrasonic Frequency.
* Remote Generator : Power Control and Timer Function with LCD
* BTL Sonicator Installed : Robust and Stable Running
* Sweep Function can Realize Complete Cleaning by the Dispersion of Ultrasound
* Auto Optimization of Frequency as various Water Level and Temperature.
* Foot Switch Control
* HF-Frequency : 40kHz
* Temperature Range from Ambient to 105℃
* Supply Full Set with Lid, Foot Switch and Generator (Basket excluded)
* Drain is mounted in the bottom
* Maximum 99minutes of Cleaning Time

Specifications & Ordering information

Spec. \ Model		"WUC-N30H" Max. Capa. 30 Lit	"WUC-N47H" Max. Capa. 47 Lit	"WUC-N60H" Max. Capa. 60 Lit	"WUC-N74H" Max. Capa. 74 Lit
Capacity		30 Lit	47 Lit	60 Lit	74 Lit
HF-frequency		40kHz	40kHz	40kHz	40kHz
HF-peak out		704W	990W	1,210W	1,430W
Heat temp.		ambient to 105℃	ambient to 105℃	ambient to 105℃	ambient to 105℃
Heating Power		990W			
Timer (min)		0~99 min.	0~99 min.	0~99 min.	0~99 min.
Tank Size inner (w×d×h) (mm)		400×300×250	450×350×300	500×400×300	550×450×300
Tank Size external (w×d×h) (mm)		480×380×400	530×430×450	530×430×450	580×480×450
Power Consumption		1,694W	1,980W	2,200W	2,420W
Weight net		26kg	31kg	36kg	41kg
Packing Dimension (w×d×h) (mm)		620×520×640	670×570×710	720×620×710	770×670×710
Gross Weight		32 kg	37 kg	42 kg	47 kg
Remote Generator	Display LCD	FND			
	Power	600W	900W	1,200W	1,500W
	Weight	9kg	10kg	10kg	10kg
Cat. No.	230V	DH.WUC.N30H	DH.WUC.N47H	DH.WUC.N60H	DH.WUC.N74H
	120V	DH.WUC.N130H	DH.WUC.N147H	DH.WUC.N160H	DH.WUC.N174H
Price, Each. ₩					

* Other Specifications are available upon Customer's Request.

Optional Wire Basket, Stainless-steel

		Ea. Price, ₩
SL.Bas7021	Basket, Wire, **"Bas7021"**, for 30Lit., 340×240×h150mm	
SL.Bas7022	, **"Bas7022"**, for 47Lit., 390×290×h200mm	
SL.Bas7023	, **"Bas7023"**, for 60Lit., 440×340×h200mm	
SL.Bas7024	, **"Bas7024"**, for 74Lit., 490×390×h200mm	

DAIHAN Scientific

ViscoMeter

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Multi-speed Rotary Viscometer-full Set ····· P. 250
Portable Rotary Viscometer-full Set ····· P. 253
Programmable Rotary Viscometer-full Set ····· P. 251
Remote Temp. Control Rotary Viscometer-full Set ····· P. 252
Standard Rotary Viscometer-full Set ····· P. 249

Standard Rotary Viscometer

"WVS" model

Programmable Rotary Viscometer

"WVP" model

Remote Temp. Control Rotary Viscometer

"WVT" model

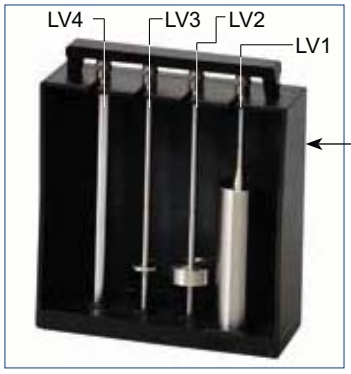
DAIHAN® Standard Rotary Viscometer-full Set "WVS-0.1M" & "WVS-2M", with Calibration Certificate, 1~2,000,000 cP With Standard Spindle-kit(LV1~4), Lifting Stand, Hand Handling Case, 0.3~60rpm, 표준형 디지털 회전 점도계-풀세트

Standard Rotary Viscometer Full Set "WVS"

- ***Ideal for measuring the Viscosity of Various Liquid such as Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent and Medicines.***
- ***Component of Set : Viscometer Unit "WVS", Spindle Kit(LV 1~4), Lifting Stand, Hand Handling Case, Calibration Certificate***
- ***Included ASTM Standard Spindle-kit of 4 Ea. : LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M***
- ***Direct Readout of all Measurement Parameters on an illuminated LCD.***
- ***The Viscometer is equipped with many Pre-sets speeds : ("WVS-0.1M" : 6- / 12- / 30- / 60- RPM, "WVS-2M" : 0.3- / 0.6- / 1.5- / 3- / 6- / 12- / 30- / 60-RPM)***
- ***Auto Range Function to determine the Maximum Viscosity with each Spindle / Speed Combination.***
- ***Safety Protection Against Sudden Rises in the Power Supply.***

∗ Data on screen : · Speed Selected : RPM · Spindle Selected : S.P.
· Viscosity Reading : cP(mPa.s) · Percentage of Full Scale : %
· Sample Temperature : ℃

∗ Viscosity Reading : Dynamic Viscosity (cP or mPa-s)
∗ The Viscometer and the PT100 can be calibrated by the User.
∗ Ultra-sensitive Front Keyboard that allows Easy Input of all Parameters.
∗ Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP / rpm.)
∗ Sound Alarm if the Equipment is Working at Under 20% of Selected full Scale
∗ Direct reading in cP(mPa.s) ∗ without Limits
∗ Can be Use with Various Optional Accessories : Ultra-Low Viscosity Adaptor RTD Temp. Probe, Micro Printer



(1) Standard LV Spindle kit, LV1 ~ 4
Included for "WVS-0.1M" & "WVS-2M" Meter

(2) Ultra-Low Viscosity Adaptor

(3) RTD Temp. Probe

(4) Micro Printer, with Cable

Specifications & Ordering information

Spec. \ Model	A. "WVS-0.1M" Max. Viscosity. 100,000 cP	B. "WVS-2M" Max. Viscosity. 2,000,000 cP
Viscosity Range, cP(mPa.s)	1 ~ 100,000 cP	1 ~ 2,000,000 cP
Speed Range (RPM)	6, 12, 30, 60	0.3, 0.6, 1.5, 3, 6, 12, 30, 60
Certificate	with Individual Calibration Certificate	
ASTM Standard Spindle-kit& Measure Viscosity Range : cP	Included Standard Spindle-kit(LV1~LV4), Stainless-steel ① LV1 : 15 ~ 20,000cP ② LV2 : 50 ~ 100,000cP ③ LV3 : 200 ~ 400,000 cP ④ LV4 : 1,000 ~ 2,000,000cP ※ LV0 Spindle for 1~20cP(Optional)	
Measurement Error	±5% (Newton Liquid)	
Accuracy	±1.0% of range	
Repeatability	±0.5%	
Ambient Temperature	5℃ ~ 35℃ Relative Humidity : ≤80%	
Weight	4 kg	
Electrical Reqts.	AC 230V, 50/60Hz	

Cat. No.	230V	DH.WV1011	DH.WV1012
Price, Each. ₩			

∗ K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)

Spare Spindle-kit

		Ea. Price, ₩
DH.WV2011	(1) Standard LV Spindle kit, LV1 ~ 4, LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M	

Optional Temp. Probe/Printer/Spindle

		Ea. Price, ₩
DH.WV2011.2	(2) Ultra-Low Viscosity Adaptor for 1~20cP (LV0 Spindle) ∗ Please order with the product!, Calibration is required because there is no Software and Data of LV0 in the Viscometer	
DH.WV2041	(3) RTD Temp. Probe, 0.0~100.0℃, Accu. ±0.1, Resolution 0.1℃	
DH.WV2043	(4) Micro Printer, with RS-232, USB 1.5m Cable (Print Information : Temp., RPM, Spindle, Torque, Viscosity)	

DAIHAN® Multi-speed Rotary Viscometer-full Set "WVM-0.6M" & "WVM-6M", 1~6,000,000 cP

With Cal. Certi. & Standard Spindle kit(LV1~4), Lifting Stand, Hand Handling Case, 0.1~60-/100-rpm, 멀티 스피드 디지털 회전 점도계

Multi-speed Rotary Viscometer Full Set "WVM"

- ***Ideal for measuring the Viscosity of Various Liquid such as Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent and Medicines.***
- ***Component of Set : Viscometer Unit "WVM", Spindle Kit(LV 1~4), Lifting Stand, Hand Handling Case, Calibration Certificate***
- ***Included ASTM Standard Spindle-kit of 4 Ea. : LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M***
- ***Direct Readout of all Measurement Parameters on an illuminated LCD.***
- ***Available Pre-sets speeds, 0.1~100 rpm***
- ***Auto Range Function to determine the Maximum Viscosity with each Spindle / Speed Combination.***
- ***Safety Protection Against Sudden Rises in the Power Supply.***

∗ Data on screen : · Speed Selected : RPM · Spindle Selected : S.P.
· Viscosity Reading : cP(mPa.s) · Percentage of Full Scale : %
· Sample Temperature : ℃

∗ Viscosity Reading : Dynamic Viscosity (cP or mPa-s)
∗ The Viscometer and the PT100 can be calibrated by the User.
∗ Ultra-sensitive Front Keyboard that allows Easy Input of all Parameters.
∗ Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP / rpm.)
∗ Sound Alarm if the Equipment is Working at Under 20% of Selected full Scale
∗ Direct reading in cP(mPa.s) ∗ without Limits
∗ Can be Use with Various Optional Accessories : Ultra-Low Viscosity Adaptor RTD Temp. Probe, Micro Printer, Small Sample Adapter

(1) Standard LV Spindle kit, LV1~4
Included for "WVM-0.6M" & "WVM-6M" Meter

(2) Ultra-Low Viscosity Adaptor

(3) RTD Temp. Probe

(4) Small Sample Adapter

(5) Micro Printer, with Cable

Specifications & Ordering information

Spec. \ Model	A. "WVM-0.6M" Max. Viscosity. 600,000cP	B. "WVM-6M" Max. Viscosity. 6,000,000cP
Viscosity Range cP(mPa.s)	1 ~ 600,000cP	1 ~ 6,000,000cP
Speed Range (RPM)	1 ~ 60	0.1 ~ 100
Certificate	with Individual Calibration Certificate	
Certificate	Included Standard Spindle-kit(LV1~LV4), Stainless-steel ① LV1 : 15 ~ 20,000cP ② LV2 : 50 ~ 100,000cP ③ LV3 : 200 ~ 400,000 cP ④ LV4 : 1,000 ~ 2,000,000cP ※ LV0 Spindle for 1~20cP(Optional)	
Measurement Error	±5% (Newton Liquid)	
Accuracy	±1.0% of range	
Repeatability	±0.5%	
Ambient Temperature	5℃ ~ 35℃ Relative Humidity : ≤80%	
Weight	4 kg	
Electrical Reqts.	AC 230V, 50/60Hz	
Cat. No.	**DH.WV1021**	**DH.WV1022**
Price, Each. ₩		

∗ K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)

Spare Spindle-kit

		Ea. Price, ₩
DH.WV2011	(1) Standard LV Spindle kit, LV1~4, LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M	

Optional Temp. Probe/Sample Adapter/Printer/Spindle

		Ea. Price, ₩
DH.WV2011.2	(2) Ultra-Low Viscosity Adaptor for 1~20cP (LV0 Spindle) **∗ Please order with the product!** **because there is no Software and Data of LV0 in the Viscometer**	
DH.WV2041	(3) RTD Temp. Probe, 0.0~100.0℃, Accu. ±0.1, Resolution 0.1℃	
DH.WV2042	(4) Small Sample Adapter, Stainless-steel, 2~16㎖	
DH.WV2043	(5) Micro Printer, with RS-232, USB 1.5m Cable (Print Information : Temp., RPM, Spindle, Torque, Viscosity)	

DAIHAN® Programmable Rotary Viscometer-full Set "WVP-6M" & "WVP-40M", 1~40,000,000cP

With Calibration Certificate & Standard Spindle-kit(LV1~4) & (RV2~7), Lifting Stand, 0.1~200rpm, 프로그램식 디지털 회전 점도계

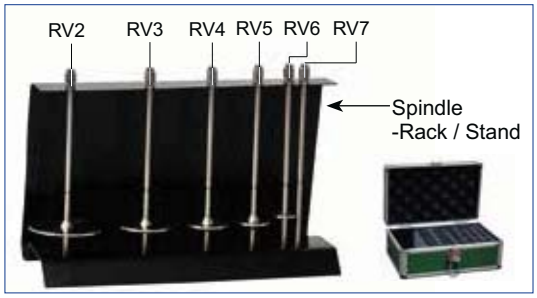
Programmable Rotary Viscometer Full Set "WVP"

- ***Ideal for measuring the Viscosity of Various Liquid : Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent, Medicines.***
- ***Component of Set : Viscometer Unit "WVP", Spindle Kit, Lifting Stand, Hand Handling Case, Calibration Certificate***
- ***Included ASTM Standard Spindle-kit of 4 or 6 Ea. : "WVP-6M" model - LV1, LV2, LV3 , LV4 / "WVP-40M" model - RV2, RV3, RV4, RV5,RV6, RV7***
- ***Available Pre-sets speeds, 0.1~200 rpm***
- ***Auto Test of the Equipment by scanning at Different Speeds, with Audible and Visual warning if it is not Operating Properly.***
- ***Datalogger Function of the obtained results when an Experiment is performed***
- ***Safety Protection Against Sudden Rises in the Power Supply.***
- ***Auto Range Function to determine the Maximum Viscosity with each Spindle / Speed Combination.***

∗ Data on screen : · Speed Selected : RPM · Spindle Selected : S.P.
· Viscosity Reading : cP (mPa.s) · Percentage of Full Scale : %
· Sample Temperature : ℃
∗ Shear Rate (with special spindles) : SR ∗ Shear Stress (with special spindles) : SS
∗ Determination of Relative Viscosity and Absolute Viscosity
∗ Viscosity Reading : Dynamic Viscosity (cP or mPa-s)
∗ Determination of Shear Rate and Shear Stress with Coaxial Spindles.
∗ The Viscometer and the PT100 can be calibrated by the User.
∗ Ultra-sensitive front Keyboard that allows Easy Input of all Parameters.
∗ Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP/rpm.)
∗ Sound Alarm if the Equipment is working at under 10% of selected Full Scale.
∗ Can be Use with Various Optional Accessories : Ultra-Low Viscosity Adaptor RTD Temp. Probe, Micro Printer, Small Sample Adapter

(1) LV1 ~ 4 Spindle kit : Included for **A."WVP-6M"**

(2) Ultra-Low Viscosity Adaptor



(3) RV2~7 Spindle kit : Included for **B."WVP-40M"**

Specifications & Ordering information

Spec. \ Model	A. "WVP-6M" Max. Viscosity. 6,000,000cP	B. "WVP-40M" Max. Viscosity. 40,000,000cP
Viscosity Range cP(mPa.s)	1 ~ 6,000,000cP	100 ~ 40,000,000cP
Speed Range (RPM)	0.1 ~ 200	
Certificate	with Individual Calibration Certificate	
Included Spindle Kit	(1) LV1 ~ 4	(3) RV2 ~ 7
ASTM Standard Spindle-set (Stainless-steel) & Measure Viscosity Range : cP	① LV1 : 15 ~ 20,000cP ② LV2 : 50 ~ 100,000cP ③ LV3 : 200 ~ 400,000cP ④ LV4 : 1,000 ~ 2,000,000cP ※ LV0 Spindle for 1~20cP(Optional)	① RV2 : 100 ~ 80,000cP ② RV3 : 100 ~200,000cP ③ RV4 : 200 ~ 400,000cP ④ RV5 : 400 ~ 800,000cP ⑤ RV6 : 1,000 ~ 2,000,000cP ⑥ RV7 : 4,000 ~ 8,000,000cP
Measurement Error	±5% (Newton Liquid)	
Accuracy / Repeatability	±1.0% of range / ±0.5%	
Ambient Temperature	5℃ ~ 35℃ Relative Humidity : ≤80%	
Weight	4 kg	
Electrical Reqts.	AC 230V, 50/60Hz	
Cat. No.	**DH.WV1031**	**DH.WV1032**
Price, Ea. ₩		

∗ **K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)**

(4) RTD Temp. Probe

(5) Small Sample Adapter

(6) Micro Printer, with Cable

Spare Spindle-kit

		Ea. Price, ₩
DH.WV2011	(1) Standard LV Spindle kit, LV1~4, LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M	
DH.WV2021	(3) Standard RV Spindle kit, RV2 ~RV7 RV2 : 100~80K, RV3 : 100~200K, RV4 : 200~400K, RV5 : 400~800K, RV6 : 1K~2M, RV7 : 4K~8M	

Optional Temp. Probe/Sample Adapter/Printer /Spindle

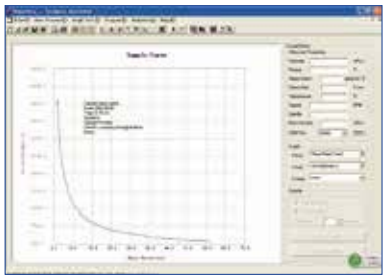
		Ea. Price, ₩
DH.WV2011.2	(2) Ultra-Low Viscosity Adaptor for 1~20cP(LV0 Spindle) ∗ **Please order with the product! because there is no Software and Data of LV0 in the Viscometer**	
DH.WV2041	(4) RTD Temp. Probe, 0.0~100.0℃, Accu. ±0.1, Resolution 0.1℃	
DH.WV2042	(5) Small Sample Adapter, Stainless-steel, 2~16㎖	
DH.WV2043	(6) Micro Printer, with RS-232, USB 1.5m Cable (Print Information : Temp., RPM, Spindle, Torque, Viscosity)	

DAIHAN® Remote Temp. Control Rotary Viscometer-full Set "WVT-0.33M" & "WVT-3.3M", 5~3,300,000cP

With Calibration Certificate & Spindle-kit(LV1~4) & (RV2~7), Lifting Stand, 0.1~100rpm, 온도조절 디지털 회전 점도계

Remote Temp. Control Rotary Viscometer Full Set "WVT"

- ***Only need 2~16㎖ Sample Amount***
- ***Ideal for measuring the Viscosity of Various Liquid such as Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent and Medicines.***
- ***Component of Set : Viscometer Unit "WVT", Spindle Kit, Lifting Stand, Calibration Certificate***
- ***Included ASTM Standard Spindle-kit of 4 Ea. :***
  "WVT-0.33M" model - SC4(LV Range)
  21 : 5~15K, 27 : 25~250K, 28 : 50~500K, 29 : 100~1M
  "WVT-3.3M" model - SC4(RV Range)
  21 : 50~50K, 27 : 250~2.5M, 28 : 500~5M, 29 : 1K~10M
- ***Built-in High Precision Automatic Optimization Programmable Temperature Control Instrument***
- ***Heating and Cooling, 0.1~8℃ / Minute Arbitrary Adjustable***
- ***Special Spindle, Guarantee Good Mixing Effect, No Precipitation***
- ***Measurement Process and Data Analysis All Rely on the Computer Automatically***
- ***The Disassembling Spindle and Measuring Cylinder Structure, Easy to Clean***
- ***Available Pre-sets Speeds, 0.1~100 rpm***
- ***Manual Lifting Positioning System, Ensure the Liquid Level Height Repeatability***
- ***Special Spindle, Guarantee Good Mixing Effect, No Precipitation***



Viscosity Curve Analysis Software
for "WVT-0.33M & 3.3M" Meter

∗ Data on screen : · Speed Selected : RPM · Spindle Selected : S.P.
· Viscosity Reading : cP (mPa.s) · Percentage of Full Scale : %
· Sample Temperature : ℃
∗ Shear Rate (with special spindles) : SR ∗ Shear Stress (with special spindles) : SS
∗ Determination of Relative Viscosity and Absolute Viscosity
∗ Viscosity Reading : Dynamic Viscosity (cP or mPa-s)
∗ Determination of Shear Rate and Shear Stress with Coaxial Spindles.
∗ The Viscometer and the PT100 can be calibrated by the User.
∗ Ultra-sensitive front Keyboard that allows Easy Input of all Parameters.
∗ Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP/rpm.)
∗ Sound Alarm if the Equipment is working at under 10% of selected Full Scale.

(1) SC4 Spindle kit : Included
for "WVT-0.33M & 3.3M" Meter

(2) Micro Printer, with Cable

Specifications & Ordering information

Spec. \ Model	A. "WVT-0.33M" Max. Viscosity. 330,000cP	B. "WVT-3.3M" Max. Viscosity. 3,300,000cP
Viscosity Range cP(mPa.s)	5 ~ 330,000cP	50 ~ 3,300,000cP
Speed Range (RPM)	0.1 ~ 100	
Certificate	with Individual Calibration Certificate	
ASTM Standard Spindle-kit & Measure Viscosity Range : cP	Included ASTM Standard Spindle-kit, Stainless-steel	
	LV Range ① SC4-21 : 5 ~ 5,000cP ② SC4-27 : 25 ~ 250,000cP ③ SC4-28 : 50 ~ 500,000cP ④ SC4-29 : 100 ~ 1,000,000cP	RV Range ① SC4-21 : 50 ~ 50,000cP ② SC4-27 : 250 ~ 2,500,000cP ③ SC4-28 : 500 ~ 5,000,000cP ④ SC4-29 : 1000 ~ 10,000,000cP
Temperature Range	-1℃ ~ 150℃(Precision ±1.0℃)	
Measurement Error	±5% (Newton Liquid)	
Accuracy / Repeatability	±1.0% of range / ±0.5%	
Ambient Temperature	5℃ ~ 35℃ Relative Humidity : ≤80%	
Weight	14 kg	
Electrical Reqts.	Input AC 100~240V, 50/60Hz, Output DC17V 1.2A	
Cat. No.	**DH.WV1041**	**DH.WV1042**
Price, Each. ₩		

∗ K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)

Spare Spindle-kit

Cat. No.		Ea. Price, ₩
DH.WV2031	(1) Standard SC4 Spindle kit, 21~29 LV Range - SC4-21 : 5~5K, 25 : 25~250K, 28 : 50~500K, 29 : 100~1M RV Range - SC4-21 : 50~50K, 25 : 250~2.5M, 28 : 500~5M, 29 : 1K~10M	

Optional Printer

Cat. No.		Ea. Price, ₩
DH.WV2043	(2) Micro Printer, with RS-232, USB 1.5m Cable (Print Information : Temp., RPM, Spindle, Torque, Viscosity)	

DAIHAN® Portable Rotary Viscometer-full Set "WVH-0.15M" & "WVH-0.3M", 25~300,000cP

With Calibration Certificate & Spindle-kit(B1~4), Hand Handling Case, Up to 200rpm, 포터블 디지털 회전 점도계

Portable Rotary Viscometer Full Set "WVH"

- ***Microcomputer Control Technique, User Friendly Interface***
- ***Ideal for Measuring the Viscosity of Various Liquid such as Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent and Medicines.***
- ***Brand New and Humanized Design, Easy Operation, Accurate and Fast Measurement***
- ***Calibration of Full Scale, Every Level Linearity***
- ***New Design, Liquid Crystal Display, Prevent Slippery Handle, Overrange Alarm***
- ***Display Temperature, Viscosity, Rotate Speed, Torsion in Percentage Serial Number of Rotor and the Maximum Viscosity of selected Rotor in Current Speed on LCD***
- ***Unique Structure Design, Insure Useful Life and Measurement Accuracy***
- ***AC / DC Power Supply in Two Design, Lithium Batteries Continuous Measuring Eight Hours without Charging***
- ***Component of Set : Viscometer Unit "WVH", Spindle Kit, Hand Handling Case, Calibration Certificate***

∗ Data on screen : · Speed Selected : RPM · Spindle Selected : S.P.
· Viscosity Reading : cP(mPa.s) · Percentage of Full Scale : %
· Sample Temperature : ℃

∗ Shear Rate (with special spindles) : SR ∗ Shear Stress (with special spindles) : SS

∗ Determination of Relative Viscosity and Absolute Viscosity

∗ Viscosity Reading : Dynamic Viscosity (cP or mPa-s)

∗ Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP/rpm.)

∗ Sound Alarm if the Equipment is working at under 10% of selected Full Scale.

Lift Mode

Portable Mode

(1) Standard Spindle kit, B1~4
Included for "WVH-0.15M & 0.3M" Meter

Specifications & Ordering information

Spec. \ Model	A. "WVH-0.15M" Max. Viscosity. 150,000cP	B. "WVH-0.3M" Max. Viscosity. 300,000cP
Viscosity Range cP(mPa.s)	25 ~ 150,000cP	50~300,000cP
Speed Range (RPM)	60 / 100 / 150 / 200	
Certificate	with Individual Calibration Certificate	
ASTM Standard Spindle-kit & Measure Viscosity Range : cP	Included ASTM Standard Spindle-kit, Stainless-steel	
	① B1 : 25 ~ 883cP ② B2 : 90 ~ 3,000cP ③ B3 : 165 ~ 55,000cP ④ B4 : 450 ~ 150,000cP	① B1 : 50 ~ 1,666cP ② B2 : 180 ~ 6,000cP ③ B3 : 330 ~ 110,000cP ④ B4 : 900 ~ 300,000cP
Measurement Error	±5% (Newton Liquid)	
Accuracy / Repeatability	±2.0% of range / 1.0%	
Ambient Temperature	5℃ ~ 35℃ Relative Humidity : ≤80%	
Weight	3 kg	
Electrical Reqts.	AC 220V, 50/60Hz, Lithium Battery	
Cat. No.	DH.WV1051	DH.WV1052
Price, Each. ₩		

∗ K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)

Spare Spindle-kit

		Ea. Price, ₩
DH.WV2011	(1) Standard Spindle kit, B1~4	

MaXcrub™

Glass/Labware Washer

Ideal for Laboratory

Glass/Labware Washer

High Performance Cleaning | User Safety | Program Cycle

High-performance Cleaning

- Outstanding fast cycle and high-performance cleaning results from efficient direct injection washing.
- High performance pump ensure high flow rate of water.
- Efficient water spray pressure bring about better and faster cleaning.
- Water, liquid detergent and distilled water automatically injected by program washing cycle.

Safety Door Lock

- Door is automatically locked for user safety when washing cycle starts.

Compact, Robust Design & Efficient Construction

- Compact design for space saving and maximize working capacity in laboratory.
- Double layer structure ensures soundproof and heatproof during operation.
- Built-in steam condenser prevents steam to enter into the laboratory.
- Telescopic sliding rails ensures safe and easy to load and unload.

Irrigation Nozzle

Efficient Washing Cycle Program

- Provide 7 program washing cycles : Pre-set 6 programs & customized 1 program.

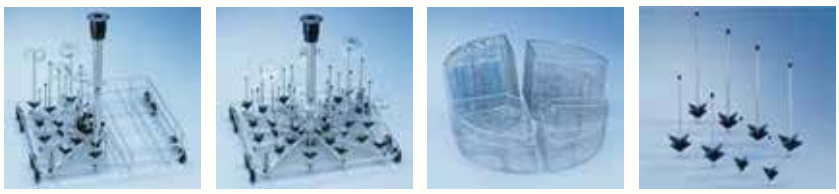
Pre-set 6 Program Cycles Setting Value

Pre-set 6 Washing Cycle	PreWash	Light Wash	Standard Wash	Light Demi	Standard Demi	Intense Wash
Tap Water Wash	3min	-	-	-	-	-
Detergent Wash	-	60℃ / 8min	75℃ / 8min	60℃ / 5min	75℃ / 5min	90℃ / 10min
Rinse Wash	-	75℃ / 5min	90℃ / 5min	75℃ / 3min	90℃ / 3min	90℃ / 5min
Distilled Water Wash	-	-	-	3min	3min	2min

Spray Arm

Various Interchangeable Rack & Basket

- Included 1ea STS wire basket.
- Customizable various rack, Basket, Pipette rack, Volumetric flask rack, Direct injection kit, etc.



Articles	Cat. No	Description

"MaXcrub™ T1" Glass/Labware Washer, Max 85℃, Washing Surface 0.52m², 400Lit/min, Max 5bar

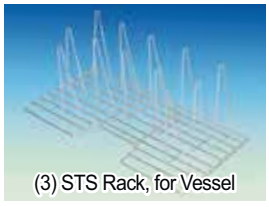
With 1×STS Wire Basket, Water-/Detergent-/Distilled Water-Auto Injection, Program Washing Cycle, Double Wall, Telescopic Rail, 초자 세척기

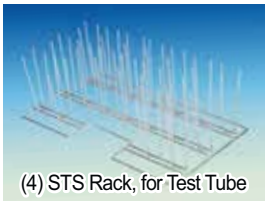
Glass/Labware Washer "MaXcrub™ T1"

Glass/Labware Washer "MaXcrub™ T1" with Optional Customizing Rack

(1) (Included) STS Wire Basket

(2) STS Injection Rack


(3) STS Rack, for Vessel


(4) STS Rack, for Test Tube

(5) Mesh-type STS Rack

Optional Liquid Detergent

- ***Made in Korea*** ■ ***PL(Product Liability) Insurance.***
- ***with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.***
- ***Ideal for Clinical, Pharmaceutical, Bioresearch, Chemical Research, etc.***
- ***Outstanding Fast Washing Cycle and High-performance Cleaning Results from Efficient Direct Injection Washing.***
- ***Water-/Detergent-/Distilled Water- Automatically Injected into Wash Chamber via Pumps.***
- ***Double Layer Wall ensures Soundproof and Heatproof.***
- ***Automatic Door Lock system for User Safety.***
- ***Special Steam Condensing Mechanism for User Safety.***

* Built-in Telescopic Sliding Rail for Safety and Easy to Use.
* Provides Efficient Program Washing Cycle : Pre-set 6Programs and Customizable 1Program.
* Built-in Steam Condenser Prevents Steam to enter into the Laboratory.
* Included 1ea STS Wire Basket .
* Customizable Various Rack, Basket, Pipette Rack, Volumetric Flask Rack, Direct Injection Kit, etc.

Specifications & Ordering information

Spec. \ Model			"MaXcrub™ T1"
Total Washing Surface			0.52m²
Temp. Range			Room Temp +5℃ to 85℃
Display			Digital LCD with Back-Light Function
Controller			Digital Fuzzy-Control System (Fully Automatic), Touch Button UI
Programmable Function			Pre-set 6 Programs & Customizable 1 Programs
Wash Pump			Recirculation : 400Lit/min, Water Pressure : 3~5bar, Water Consumption : 8~10Lit
Rack			Included 1ea Stainless-steel Standard Rack
Safety Circuit			Over-Temp./-Pressure/-Current protection, Sensor Error Detection
Material			Stainless-steel (#304)-Internal, Stainless-steel (#304)-External
Dimension (w×d×h)	Interior		508×515×h407 mm
	Exterior		600×625×h870 mm
Power Consumption			5 kW
Net Weight			95 kg
Electric Reqts.			1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz
Cat. No.	60Hz	230V	DH.WGW0400
		120V	DH.WGW0401
	50Hz	230V	DH.WGW5400
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ **Note! Freight and Installation Charges Separately.**

Spare Stainless-steel Standard Rack

		Ea. Price, ₩
DH.WGW01001	(1) STS Wire Basket, for Rail, 495×510mm	

Optional Stainless-steel Injection Rack for Various Vessel

		Ea. Price, ₩
DH.WGW01002	(2) STS Injection Rack for Various Vessel, 495×510mm	

Optional Stainless-steel Wire Rack, Use for Included Standard Rack

		Ea. Price, ₩
DH.WGW1003	(3) STS Wire Rack, for Various Vessel, 248×460×h180mm	
DH.WGW1004	(4) , for Test Tube , 248×460×h160mm	
DH.WGW1005	(5) , Mesh-type, for Petri Dish, 248×460×h65mm	

Optional Liquid Cleaning Detergent & Rinse

		Ea. Price, ₩
DH.WGW02010	(6) Potassium Hydroxide Liquid Cleaning Detergent, 18Lit	
DH.WGW02011	(7) Nonionic Surfactant Liquid Rinse, 18Lit	

DAIHAN Scientific

Water Purification

DAIHAN Scientific
YOUR PARTNER *in* LABORATORY

Basic Water Still ····· P. 257
Classic Water Still *New* ····· P. 258~259
Water Purification System ····· P. 260~262
- Reverse Osmosis(RO) ····· P. 260
- Ultra Pure(UP) ····· P. 261
- Ultra Pure(UP) & Pure(RO) ····· P. 262

Water Still

"W4L" model
4Lit Basic Water Still,
with 304 Stainless-steel Heater

"WCS" model
4 & 8Lit Cabinet Water Still,
With Pure Silica / Quartz Heater

"CWS" model
With PP 1㎛ pore Cartridge Prefilter
3.5 & 7.5 Lit/hr

"WWS-P" model
With PP 1㎛ pore Cartridge Prefilter
4, 8, & 12 Lit/hr

Water Purification System

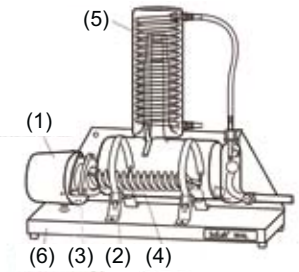
Reverse Osmosis(RO)
"New-P.NIX RO"

Ultra Pure(UP)
"New-P.NIX UP"

Ultra Pure(UP) & Pure(RO)
"New-P.NIX Power"

SciLab® Laboratory Basic Water Still "W4L", with 304 Stainless-steel Heater, 4 Lit/hr, 3.0 ~ 4.0 ㎲/cm
Suitable for Bench & Wall Mounting, Borosilicate Glass Boiler, **랩용 증류수 제조기**

4Lit Basic Water Still,
with 304 Stainless-steel Heater



■ Supplied by SciLab Korea ***■ Connect and Operate Directly from Tap Water***
■ Heat Resistant Borosilicate Glass Boiler fitted with 3kW 304 Stainless-steel Heater.

* High Efficiency Coil Condenser ensures Low Temperature, High Output Quality Distillate of Conductivity 3 to 4 ㎲/cm.
* Compact Construction Suitable for Bench and wall Mounting
* Built-in Constant Level Device with Schott Vendura-Nova Valve for Drainage provides Easy Descaling without Dismantling
* Safety Thermostat Built into the Heater protects the Water Still in the Event of Water Supply Failure and Automatically Resets when the Water Supply is restored.
* Borosilicate Glass Boiler and High-efficiency Condenser ensure the Highest in Distillate Purity.

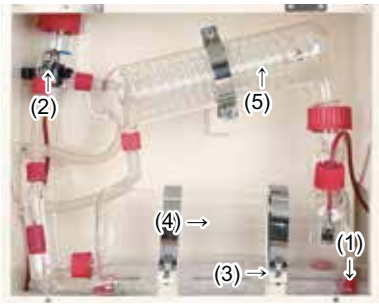
Spec. \ Model	"W4L"
Distillate Output	4 Liters/hour
Quality of Distillate : pH / Conductivity	5.0 ~ 6.5 pH / 3.0 ~ 4.0 ㎲/cm
Resistivity / Temperature	0.25 ~ 0.30 ㏁·cm / 25 ~ 35℃
Pyrogen Content	Pyrogen Free
Water Supply Requirement	1 Liter/min, minimum 3psi (0.2 bar)
Dimensions (W×D×H), Weight	500×150×h450 mm, 5.25kg
Power Supply	220/240V, 50/60Hz, 3kW
Cat. No.	**SL.Wat201**
Price, Each. ₩	

Spare Accessory

		Ea. Price,₩
SL.Wat201.1	(1) Stainless-steel Heater	
SL.Wat201.2	(2) Strap	
SL.Wat201.3	(3) Metal Flange	
SL.Wat201.4	(4) Glass Boiler	
SL.Wat201.5	(5) Condenser	
SL.Wat201.6	(6) Support Stand	

SciLab® Cabinet Water Still "WCS", with Silica / Quartz Heater, Pyrogen-free, 4 & 8 Lit/hr, 1.2 ~ 2.0 ㎲/cm
Suitable for Bench & Wall Mounting, Heat Resistant Borosilicate Glass Boiler, **케비닛형 증류수 제조기**

4 & 8Lit. Cabinet Water Still,
with Pure Silica / Quartz Heater.



■ Supplied by SciLab Korea ***■ Excellent Quality Glassware made from Borosilicate Glass***
■ Safety Circuits cut off Electrical Power to Heaters and Trigger Audible and Visual Alarms in the Event of Water Supply Failure or High Boiler Temperature

* Robustly built Epoxy-coated Steel Cabinet as Protective Housing adds a Touch Elegance to the Exquisite Water Still
* Horizontal Thick Walled, Heat Resistant Borosilicate Glass Boiler fitted with two 1.5kW Silica Heaters
* High Efficiency Coil Condenser ensures Low Temperature, High Output Quality Distillate
* Screwthread Connectors enable Easy Fitting or Removal of Houses Safely and Leak Free Operation
* Built-in Constant Level Device with Schott Vendura-Nova valve for Drainage provides Efficient Boiler operation, Over Flow Protection and Easy Descaling without Dismantling
* Visual Flow Control Valve for Setting Water Supply Input for Maximum Operation Efficiency
* Float Switch activates Safety Circuits in the Event of Water Supply Failure. Automatically resets when Water Supply is restored
* Temperature-sensitive Thermal Switch as Back-up Protection which Activates Safety Circuits in the event of Abnormally High Boiler Temperature. Automatically resets when Boiler Temperature returns to Normal
* High Quality Electrical Components from Reputable Manufacturers meeting International Specifications and Standards

Spec. \ Model	"WCS4L"	"WCS8L"
Distillate Output	4 Liters/hour	8 Liters/hour
Quality of Distillate : pH	5.0 ~ 6.5 pH	
Conductivity	1.2 ~ 2.0 ㎲/cm	
Pyrogen Content	Pyrogen Free	
Temperature	25 ~ 35℃	
Water Supply Requirement	1 Liter/min, minimum 3psi (0.2 bar)	
Dimensions (W×D×H) , Weight	500×225×h395 mm, 14.90kg	500×330×h395 mm, 17.90kg
Power Supply	220/240V, 50/60Hz, 3kW	220/240V, 50/60Hz, 6kW
Cat. No.	**SL.Wat203**	**SL.Wat205**
Price, Each. ₩		

Spare Accessory for 4 & 8 Lit Common Use

		Ea. Price,₩
SL.Wat203.1	(1) Silica Heater	
SL.Wat203.2	(2) Vertical Float Switch	
SL.Wat203.3	(3) Foam Strap	
SL.Wat203.4	(4) Glass Boiler	
SL.Wat203.5	(5) Condenser	

DAIHAN® Electric Classic Water Still, "WWS", Built-in Prefilter & Auto On/Off system

For Laboratory Water, Pyrogen-free, 0.3㏁·cm(resistivity), pH5.4 to 7.3, Capa. 4 · 8 · 12 Lit/hr

(1) with Stainless-steel 100 mesh Prefilter, (2) with PP 1㎛ pore Cartridge Prefilter, **필터부착형 증류수 제조기**

(1) with Stainless-steel 100 mesh Prefilter, "WWS-S": 4 · 8 · 12 Lit/hr

(2) with PP 1㎛ pore Cartridge Prefilter, "WWS-P": 4 · 8 · 12 Lit/hr

- ***Made in Korea*** ■ ***2-Year Warranty***
- ***High-performance / All Stainless-steel (SUS-430/304) models : Designed for the Durability & Consistent Quality***
- ***"WWS-S" models, Built-in Stainless-steel(SUS-304) Prefilter Kit, interchangeable 100 mesh (150㎛) : Remove Particles & Scale-forming impurity.***
- ***"WWS-P" models, Built-in PP(Polypropylene) 1㎛ Prefilter / Cartridge Kit, interchangeable : Remove Rust, Particles & Scale-forming impurity.***
- ***All Models, Complete Set with :***
  - ***① Stainless-steel Unit Kit , ② External Consistent-Level Device,***
  - ***③ Drain Valve, ④ Prefilter Kit,***
  - ***⑤ 2m Feeding Water Tubing (Silicone) Assembly for Connection of Water Tap Φ15 or Φ19 mm,***
  - ***⑥ PP Un-equal Tapered Connector Φ8,10,12 / 14,16mm-for Different Diameter Tubings***
- ***Auto On/Off with Water Level Sensor/Micro Level Sensor.***

∗ This space-saving horizontal condenser was designed for durability and consistent quality

∗ Energy saving features include a condenser that preheats the feedwater and a double-walled evaporator.

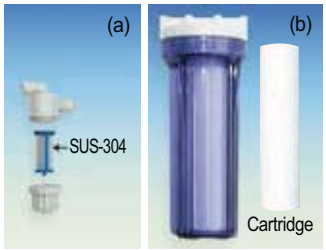
∗ A low water cutoff protects heating elements from burn-out when water supply is interrupted

∗ Stainless-steel Heater Built-in 0.4mm Ni/Cr. Element, Boiler, Efficient Energy and Water Consumption.

∗ Sealing : Silicone O-ring packing.

Plug Code "C"

Plug Code "F"



Stainless-steel Filter Kit & P.P Filter Kit

Ex> Installation of Water Still

Specifications & Ordering information

Spec. \ Model		(1) With Stainless steel 100 mesh Prefilter			(2) With PP 1㎛ pore Cartridge Prefilter		
		"WWS-S4"	"WWS-S8"	"WWS-S12"	"WWS-P4"	"WWS-P8"	"WWS-P12"
Capacity(Water)		4 Lit/hr	8 Lit/hr	12 Lit/hr	4 Lit/hr	8 Lit/hr	12 Lit/hr
Filter	Function	Remove Particles & Scale-forming impurity			Remove Rust, Particles & Scale-forming impurity		
	Material	Stainless-steel, SUS304			PP(Polypropylene)		
	Housing	POM(Polyoxymethylene)			PE(Polyethylene)		
	Pore size	150㎛(100 mesh)			1㎛		
	Heat-resisting	-29℃ ~ +85℃			85℃		
Water Purity		0.3㏁·cm (resistivity), pH5.4 to 7.3					
Level Sensor		Auto On/Off with Water Level Sensor / Micro Level Sensor					
Material	Boiler	SUS-430	SUS-430		SUS-430	SUS-430	
	Condenser	SUS-304	SUS-304		SUS-304	SUS-304	
	Base	SUS-430	Aluminum		SUS-304	Aluminum	
Size	Condenser(only)	Φ85 × L375	Φ120 × L430	Φ120 × L490	Φ85 × L375	Φ120 × L430	Φ120 × L490
	Body	Φ350 × h670	Φ350 × h760	Φ350 × h760	Φ400 × h670	Φ400 × h760	Φ400 × h760
Heater		3kW	6kW (3kW×2Ea)	9kW (3kW×3Ea)	3kW	6kW (3kW×2Ea)	9kW (3kW×3Ea)
Plug Style		Plug Code "C"	Plug Code "F"		Plug Code "C"	Plug Code "F"	
Electrical Reqts.		1 Phase, AC 220 V, 60 Hz					
Cat. No.	220V	DH.WWS01004	DH.WWS01008	DH.WWS01012	DH.WWS02004	DH.WWS02008	DH.WWS02012
Price, Each. ₩							

Spare Prefilter & Optional Storage Bottle

		Ea.	Price, ₩
DH.WWS10101	(a) **Spare**, Stainless-steel 100 mesh Prefilter Kit, **"SF101"**, POM Housing Φ36×h61mm, SUS-304 Filter only Φ22×h46mm		
DH.WWS10102	(b) , PP 1㎛ pore Cartridge Prefilter & Housing Kit, **"PF102"**, PE Housing Φ110×h300mm , PP Filter only Φ60×h252mm		
DH.WWP.10PF	**Spare**, PP 1㎛ pore Cartridge Prefilter, **"PF103"**, Φ(od.) PP Filter 60×Φ(id.) 30×h 252mm		
DH.WWS10104	, PE Housing only, **"PF104"**, Φ110×h 300mm		
SL.Bot3102	**Optional**, Bottle, HDPE, Aspiration, White, 5L, Neck id-Φ70, Φ200×h360mm		
SL.Bot3103	, 10L, -Φ70, Φ250×h460mm		
SL.Bot3104	, 20L, -Φ95, Φ300×h555mm		
SL.Bot3105	, 50L, -Φ95, Φ380×h700mm		

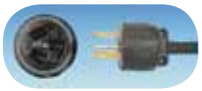
DAIHAN® 3.5 & 7.5 Lit/hr Electric Classic Water Still "CWS", Compact Cabinet-type, All Stainless Steel NEW

Good for Laboratory Water, Double Wall Still Chamber, Built-in PP 1㎛ pore Cartridge Prefilter, Auto On/Off System

스텐레스 사각 증류수 제조기, 필터부착형

3.5 & 7.5 Lit/hr Cabinet-type Water Still "CWS"

Plug Code"C"



Plug Code"F"

(1) Cartridge Prefilter & PE Housing

(2) HDPE Storage Bottle 5~50L

- ***Made in Korea***
- ***All Stainless-steel for Corrosion Resistance***
- ***Double-walled Chamber Structure for Protects Burn Injuries***
- ***High-performance & Compact Design***

* Designed for the Durability & Consistent Quality
* Built-in Interchangeable PP(Polypropylene) 1㎛ Prefilter Cartridge Kit
* Condenser and Boiler are Separable for Easy Cleaning and Maintenance
* Auto Heater On/Off with Water Level Sensor & OPT Sensor
* Pre-filter Removes Rust, Particles & Scale-forming Impurity
* Economical Energy and Water Consumption
* Built in Low water Sensor for Protects Heating Elements
* Sealing : Silicone Gasket

Specifications & Ordering information

Spec. \ Model		"CWS-4"	"CWS-8"
Capacity		Max. 3.5 Lit / hr	Max. 7.5 Lit / hr
Cooling Water		30 ~ 50 Lit	60 ~ 80 Lit
Filter	**Function**	Remove Rust, Particles & Scale-forming Impurity	
	Material	PP (Polypropylene)	
	Housing	PC (Polycarbonate) Bottle + PP (Polypropylene) Lid	
	Pore size	1 ㎛	
	Heat-resisting	85℃	
Water Purity		0.3㏁·cm (resistivity), pH5.4 to 7.3	
Level Sensor		Auto On / Off with Water Level Sensor / Micro Level Sensor	
Material	**Interior**	Stainless-steel	
	Exterior	Stainless-steel Hair Lined with Powder Coating	
	Heater	Stainless-steel Pipe	
Safety		Low Water & Over Temperature Protection, Electric Leakage Circuit Breaker	
Dimension(w×d×h)		430×315×h570 mm	445×325×h630 mm
Net Weight		12 kg	18 kg
Packing Size(w×d×h)		440×370×h610 mm	450×380×h670 mm
Gross Weight		13 kg	19 kg
Power Consumption		3 kW	6 kW
Plug Style		Plug Code "C"	Plug Code "F"
Electric Reqts.		220 V, 50 / 60 Hz, 1 Phase	
Cat. No.		**DH.WatS8001**	**DH.WatS8002**
Price, Each. ₩			

* Other Specifications are available upon Customer's Request.

※ **운임 별도!**

(1) Spare Prefilter

		Ea. Price, ₩
DH.WatA1001	PP 1㎛ pore Cartridge Prefilter Housing Kit, **"CWS-A1001"**	
DH.WatA1002	PP 1㎛ pore Cartridge Prefilter Only, **"CWS-A1002"**	
DH.WatA1003	Housing Only, PC Bottle & PP Lid **"CWS-A1003"**	

(2) Optional HDPE Storage Bottle

		Ea. Price, ₩
SL.Bot3102	Bottle, Aspiration, White, 5L , Neck id-Φ70, Φ200×h360 mm	
SL.Bot3103	, 10L, -Φ70, Φ250×h460 mm	
SL.Bot3104	, 20L, -Φ95, Φ300×h555 mm	
SL.Bot3105	, 50L, -Φ95, Φ380×h700 mm	

Articles	Cat. No	Description

"New-P.NIX® RO(Reverse Osmosis)" Water Purification System, 15 · 25 · 35-L/hr

With Pretreatment System, 2-Steps of Filter Exchange Indicator, (RO) Product 0.2 ~ 30㎲/cm, 순수 제조장치

- ***Made in Korea*** ■ ***Certified CE, ISO 9001, ISO 14001***
- ***Built-In RS 232C Port and Volumetric Dispensing Function by Timer, Included Level sensor***
- ***Auto Regular Recycling to Maintain the Optimum water Quality Level***
- ***Programming by 2 Steps for the Filter Exchange***
- ***Filter Replace Message Indicating by LCD Display & Blinking LED Light***

∗ Microprocess One Touch Technology Controller ∗ 16×4 Characters Backlight LCD Digital Display
∗ Awarded the Korean Excellent Products
∗ Included Pretreatment System HMC-PT1, 14″ Super A/C Filter, RO Pack

Included Pretreatment System 'HMC-PT1'

Specifications & Ordering information

Spec. \ Model	"New-P.NIX RO 180" Max. Daily Volume. (Max. 60L/day)	"New-P.NIX RO 280" Max. Daily Volume. (Max. 100L/day)	"New-P.NIX RO 380" Max. Daily Volume. (Max. 120L/day)
Certified Mark	CE, ISO 9001, ISO 14001		
Product Flow Rate(RO)	Max. 15L/Hr.	Max. 25L/Hr.	Max. 35L/Hr.
Daily Volume	60L/day	100L/day	120L/day
Water Quality Display	• RO Product : 0.2 to 250.0㎲/cm • Feed water : 10 to 1000㎲/cm • Temperature : 0 to 99.9℃		
Display	16×4 Characters Backlight LCD Digital Display		
Controller	Microprocess One Touch Technology		
Dimensions (w×d×h)	300×460×h 470mm		
Power	210~230V, 50/60 Hz, 60W		
Cat. No.	**DH.WWP.RO180**	**DH.WWP.RO280**	**DH.WWP.RO380**
Price, Each. ₩			

Optional Accessory

Cat. No.	Description	Ea. Price, ₩
SL.Bot3102	(1) Bottle, HDPE, Aspiration, White, 5L, Neck id-Φ70, Φ200×h360mm	
SL.Bot3103	, 10L, -Φ70, Φ250×h460mm	
SL.Bot3104	, 20L, -Φ95, Φ300×h555mm	
SL.Bot3105	, 50L, -Φ95, Φ380×h700mm	
SL.Bot3106	(2) Bottle, HDPE, Aspiration, Amber, 5L, Neck id-Φ70, Φ200×h360mm	
SL.Bot3107	, 10L, -Φ70, Φ250×h460mm	
SL.Bot3108	, 20L, -Φ95, Φ300×h555mm	
SL.Bot3109	, 50L, -Φ95, Φ380×h700mm	

(1) White, HDPE Aspiration Bottle

(2) Amber, HDPE Aspiration Bottle

(3) 14″ Super A/C Filter

Spare Filter

Cat. No.	Description	Filter Replace Period	Ea. Price, ₩
DH.WWP.PR14AC	(3) 14″ Super A/C Filter	Approx. 3~4 Month	
DH.WWP.10PF	(4) 10″ Prefilter for HMC-PT1	20 ~ 40 Day	
DH.WWP.ROM1	(5) P.NIX RO Pack Ⅰ for DH.WWP.RO180	Approx. 1 Year	
DH.WWP.ROM2	(6) P.NIX RO Pack Ⅱ for DH.WWP.RO280		
DH.WWP.ROM3	(7) P.NIX RO Pack Ⅲ for DH.WWP.RO380		

- The above mentioned Filter replacement period can be changed according to various factors such as feed water condition, producing volume and so on.

(4) 10″ Prefilter

(5) P.NIX RO Pack Ⅰ

(6), (7) P.NIX RO Pack Ⅱ, Ⅲ

"New-P.NIX® UP 900" Ultra Pure(UP) Water Purification System, Max 1.5L/min

With Total Organic Carbon(TOC), 2-Steps of Filter Exchange Indicator, (UP) Up to 18.3㏁·cm, 초순수 제조장치

■ ***Made in Korea*** ■ ***Certified CE, ISO 9001, ISO 14001***
■ ***RS 232C Port and Volumetric Dispensing Function by Timer***
■ ***Auto Regular Recycling to Maintain the Optimum water Quality Level***
■ ***Programming by 2 Steps for the Filter Exchange***
■ ***Filter Replace Message Indicating by LCD Display & Blinking LED Light***

* Microprocess One Touch Technology Controller
* 16×4 Characters Backlight LCD Digital Display
* Obtain GD, QD Mark, Awarded the Korean Excellent Products
* Included 0.2㎛ Final Capsule Filter, UP Membrane Pack
* Prerequisite : Pure Water is Required (DH.WWP.RO180)

Specifications & Ordering information

Spec. \ Model	New-P.NIX UP 900			
	Scholar-type	UV-type	Bio-type	Integrate-type
Certified Mark	CE, ISO 9001, ISO 14001			
Product Flow Rate(UP)	Max. 1.5L/min			
Water Quality Display	• UP Product : Up to 18.3㏁·cm • Feed water : 0 to 250㎲/cm • Temperature : 0 to 99.9℃			
Display	16×4 Characters Backlight LCD Digital Display			
Included Filter Composition	• 0.2㎛ Final Capsule Filter • UP Pack (DH.WWP.UPS)	• 0.2㎛ Final Capsule Filter • UP Pack (DH.WWP.UPU) • 254/185UV Lamp	• 0.2㎛ Final Capsule Filter • UP Pack (DH.WWP.UPS) • MW 5000 UF Filter(L)	• 0.2㎛ Final Capsule Filter • UP Pack(DH.WWP.UPU) • 254/185UV Lamp • MW 5000 UF Filter(L)
Controller	Microprocess One Touch Technology			
Dimensions (w×d×h)	300×500×h 470mm			
Power	210~230V, 50/60 Hz			
Cat. No.	DH.WWP.UP.S	DH.WWP.UP.U	DH.WWP.UP.B	DH.WWP.UP.I
Price, Each. ₩				

● TOC monitoring system is also available for the Integrate-type on request. (TOC monitoring display range : 0~200ppb)

(1) White, HDPE Aspiration Bottle

(2) Amber, HDPE Aspiration Bottle

Optional Accessory

		Ea. Price, ₩
SL.Bot3102	(1) Bottle, HDPE, Aspiration, White, 5L, Neck id-Φ70, Φ200×h360mm	
SL.Bot3103	, 10L, -Φ70, Φ250×h460mm	
SL.Bot3104	, 20L, -Φ95, Φ300×h555mm	
SL.Bot3105	, 50L, -Φ95, Φ380×h700mm	
SL.Bot3106	(2) Bottle, HDPE, Aspiration, Amber, 5L, Neck id-Φ70, Φ200×h360mm	
SL.Bot3107	, 10L, -Φ70, Φ250×h460mm	
SL.Bot3108	, 20L, -Φ95, Φ300×h555mm	
SL.Bot3109	, 50L, -Φ95, Φ380×h700mm	

(3) 0.2㎛ Final Capsule Filter

Spare Filter & UV Lamp

Cat. No.	Description	Filter Replace Period	Ea. Price, ₩
DH.WWP.0.2CF	(3) 0.2㎛ Final Capsule Filter	Approx. 6~8 Month	
DH.WWP.UPS	(4) P.NIX UP Pack, Scholar / Bio	Approx. 1 Year	
DH.WWP.UPU	(5) P.NIX UP Pack, Scholar-UV / Integrate		
DH.WWP.MWL	MW 5000 UF Filter(L)	Approx. 6~8 Month	
DH.WWP.UV	254/185 UV Lamp	Approx. 3 Year	

● The above mentioned Filter replacement period can be changed according to various factors such as feed water condition, producing volume and so on.

(4) P.NIX UP Pack, Scholar / Bio

(5) P.NIX UP Pack, Scholar-UV / Integrate

Articles	Cat. No	Description

"New-P.NIX® Power" Ultra Pure(UP) & Pure(RO) Water Purification All-in-One System, Max 15L/hr

With Pretreatment System, 2-Steps of Filter Exchange Indicator, (RO) 0.2 ~ 250㎲/cm, (UP) Up to 18.3㏁·cm, 초순수/순수 제조장치

■ ***Made in Korea*** ■ ***Certified CE, ISO 9001, ISO 14001***
■ ***Built-In RS 232C Port and Volumetric Dispensing Function by Timer, Included Level sensor***
■ ***Auto Regular Recycling to Maintain the Optimum water Quality Level***
■ ***Programming by 2 Steps for the Filter Exchange***
■ ***Filter Replace Message Indicating by LCD Display & Blinking LED Light***
■ ***Self-Diagnosis for Ext- & Int-System, Auto Cleaning, Auto Sensor Calibration***

∗ Microprocess One Touch Technology Controller ∗ 16×4 Characters Backlight LCD Digital Display
∗ Awarded the Korean Excellent Products
∗ Included Pretreatment System HMC-PT-3, RO Pack, UP Pack, 0.2㎛ Final Filter

Included Pretreatment System 'HMC-PT-3'

Specifications & Ordering information

Spec. \ Model	New-P.NIX Power Ⅰ			
	Scholar-type	UV-type	Bio-type	Integrate-type
Certified Mark	CE, ISO 9001, ISO 14001			
Product Flow Rate (RO & UP)	Max. 15L/Hr.			
Water Quality Display	• Pure water(RO) : 0.2 ~ 250㎲/cm • Ultra Pure water(UP) : Up to ≤18.3㏁·cm • Feed water : 0 to 990㎲/cm • Temperature : 0 to 99.9℃			
Included Filter Composition	• Pretreatment System HMC-PT-3 • RO Pack • 0.2㎛ Final Filter • UP Pack(Scholar)	• Pretreatment System HMC-PT-3 • RO Pack • 0.2㎛ Final Filter • UP Pack(S-UV) • 254/185 UV Lamp	• Pretreatment System HMC-PT-3 • RO Pack • 0.2㎛ Final Filter • UP Pack(BIO) • MW5000UF filter(M)	• Pretreatment System HMC-PT-3 • RO Pack • 0.2㎛ Final Filter • UP Pack(INT) • 254/185 UV Lamp • MW5000UF filter(M)
Display	16×4 Characters Backlight LCD Digital Display			
Controller	Microprocess One Touch Technology			
Dimensions (w×d×h)	395×500×h 470mm			
Power	210~230V, 50/60 Hz			
Cat. No.	DH.WWP.POWER.S	DH.WWP.POWER.U	DH.WWP.POWER.B	DH.WWP.POWER.I
Price, Each. ₩				

● Product Flow Rate 25L/Hr. and 35L/Hr. are also available on Request.

(3) 10″ A/C Filter (4) 10″ Prefilter

Optional Accessory

		Ea. Price, ₩
SL.Bot3102	(1) Bottle, HDPE, Aspiration, White, 5L, Neck id-Φ70, Φ200×h360mm	
SL.Bot3103	, 10L, -Φ70, Φ250×h460mm	
SL.Bot3104	, 20L, -Φ95, Φ300×h555mm	
SL.Bot3105	, 50L, -Φ95, Φ380×h700mm	
SL.Bot3106	(2) Bottle, HDPE, Aspiration, Amber, 5L, Neck id-Φ70, Φ200×h360mm	
SL.Bot3107	, 10L, -Φ70, Φ250×h460mm	
SL.Bot3108	, 20L, -Φ95, Φ300×h555mm	
SL.Bot3109	, 50L, -Φ95, Φ380×h700mm	

(5) P.NIX RO Pack Ⅰ

Spare Filter & UV Lamp

Cat. No.	Description	Filter Replace Period	Ea. Price, ₩
DH.WWP.PR10AC	(3) 10″ A/C Filter	Approx. 3~4 Month	
DH.WWP.10PF	(4) 10″ Prefilter for HMC-PT-3	20 ~ 40 Day	
DH.WWP.ROM1	(5) P.NIX RO Pack Ⅰ	Approx. 1 Year	
DH.WWP.0.2CF	(6) 0.2㎛ Final Capsule Filter	Approx. 6~8 Month	
DH.WWP.UPS	(7) P.NIX UP Pack, Scholar/Bio	Approx. 1 Year	
DH.WWP.UPU	(8) P.NIX UP Pack, Scholar-UV/ Integrate	Approx. 1 Year	
DH.WWP.MWM	MW5000UF Filter (M)	Approx. 6~8 Month	
DH.WWP.UV	UV Lamp	Using time : 2000 Hrs	

● The above mentioned Filter replacement period can be changed according to various factors such as feed water condition, producing volume and so on.

(6) 0.2㎛ Final Capsule Filter

(7), (8) P.NIX UP Pack

CERTIFICATES

☑ Quality ☑ Safety
☑ Environment Management

- **CE** — EMC & LVD Compliance
  The Certified DAIHAN Laboratory Instruments are Specified in this Catalog
- **UL** — UL Certification
  Laboratory-use Electrical Equipment for General-type Incubators & Oven, B.O.D Incubators, Vacuum Ovens
- **GD (Good Design) Mark**
- **GMP** — GMP Certification
  Good Manufacturing Practices of Medical Device
- **ISO 9001** — System Certification
  Design, Development, Manufacture & Servicing for All DAIHAN Laboraory Instruments
- **ISO 13485** — System Certification
  Design, Development, Manufacture & Servicing for All DAIHAN Laboraory Instruments
- **SQ (Service Qualification) Certification**